# *Jetfire HD Service guide*

*Category of technical document: Instruction book*

*version：A*

*Date：**JUN. 10, 2016***

*Document No： Jetfire HD*

# *Directory*


*1、Introduction to Motherboard Configuration*

*2、Description about Circuit*

*3、ID*

*4、Upgrade guidance*

*5、The longines CODSN SOP*

*6 、Jetfire HD disassembling guidance*

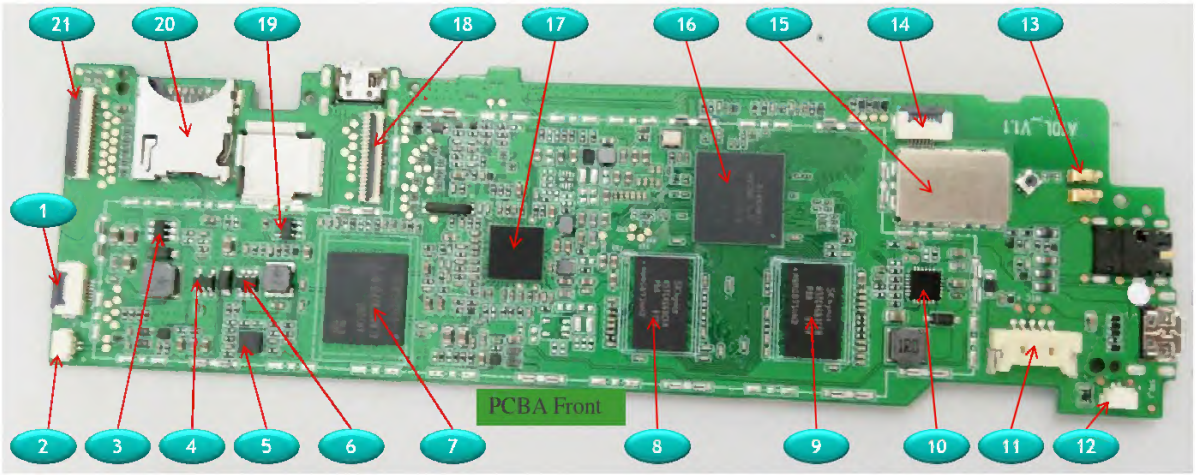
*7、Jetfire HD assembling guidance*

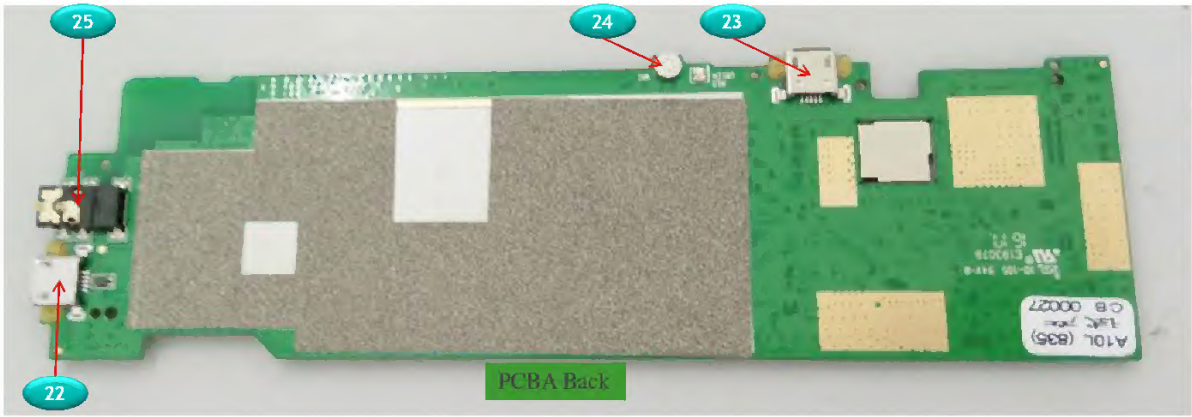
*8、Explosive view*

*9、SPL*

*10、Quick Spec*

# 1、Introduction to Motherboard Configuration



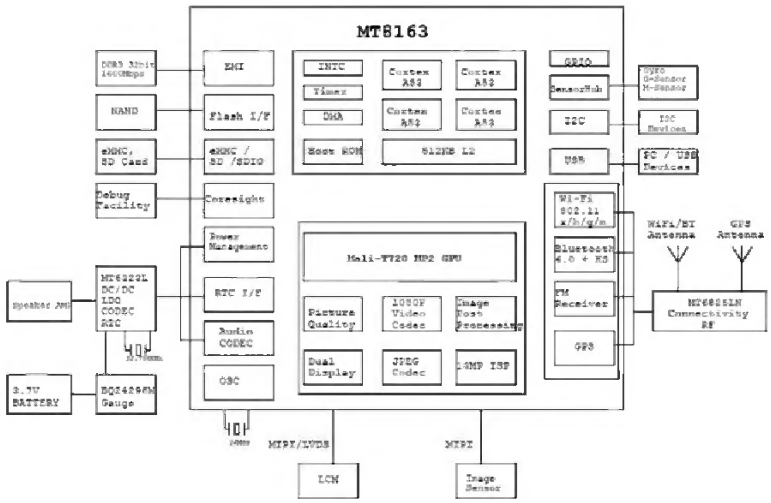



| Item | Description | Function | Item | Description | Function |
|---|---|---|---|---|---|
| 1 | connecctor\FPC\Clamshel\6P_0.5mm_down_connect\H1.5mm | TP connector | 8 | DDRIIIL | RAM |
| 2 | connector\outlet\2P_0.8mm\H1.8mm | Speak connector | 9 | DDRIIIL | RAM |
| 3 | IC\boost\SOT23-6\SY7200ABC | LCD LED driver IC | 10 | IC\charging\VQFN24\BQ24296M | charging |
| 4 | IC\LDO\voltage stabilization \SOT23-5\CL9193A33L5M\CHIPLINK | LCD LED driver IC | 11 | Connector\battery outlet\5P_1.25mm\H1.9mm | connectbattery |
| 5 | IC\G-sensor\LGA16_3x3_1H\LIS3DH | Rotate TP | 12 | Connector\outlet\2P_0.8mm\H1.8mm | SpeakConnector |
| 6 | IC\DC-DC\SOT23-6\AP2004H | USB_HOST provide power | 13 | Antenatal Dome | connectwifi antenatal |
| | IC\FLASH\EMMC | ROM | | Connector\FPC\clamshel\6 | Connect FPC |

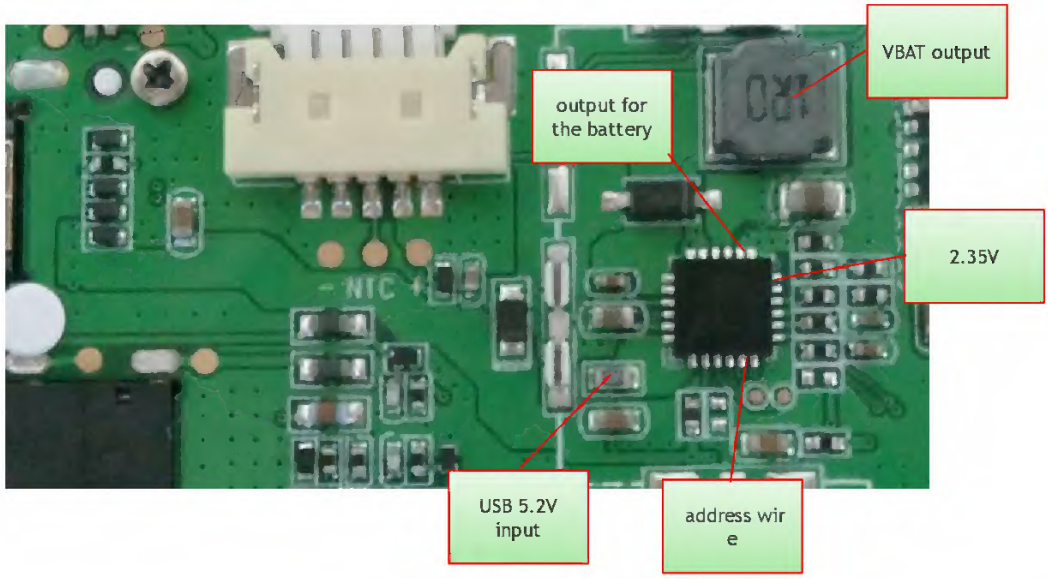
| Item | Description | Function | Item | Description | Function |
|---|---|---|---|---|---|
| 15 | GPS+BT+FM+WLAN IC | GPS+BT+FM+WLAN chipset | 22 | Micro-USB_four –foot full patch\5P_B type | USB_OTG |
| 16 | CPU\TFBGA-395b\quad-core-1.3G\MT8163V/B | CPU | 23 | Micro-USB_our –foot full patch\5P_B type | USB_HOST |
| 17 | Power management\VFBGA-145L\MT6323LGA | PMU | 24 | Mic | Recording |
| 18 | connecctorFPC\Clamshel\39P | Camera connecctor | 25 | 3.5mmEarphone holder | Connecct earphone |
| 19 | IC\current limitingSOT23-5\AP1610 | USB_HOST current limitingIC | | | |
| 20 | TF\PUSH_SMD-8 | Connecct external ROM | | | |
| 21 | Connecctor\FPC\clamshell\39P | connecctLCD FPC | | | |

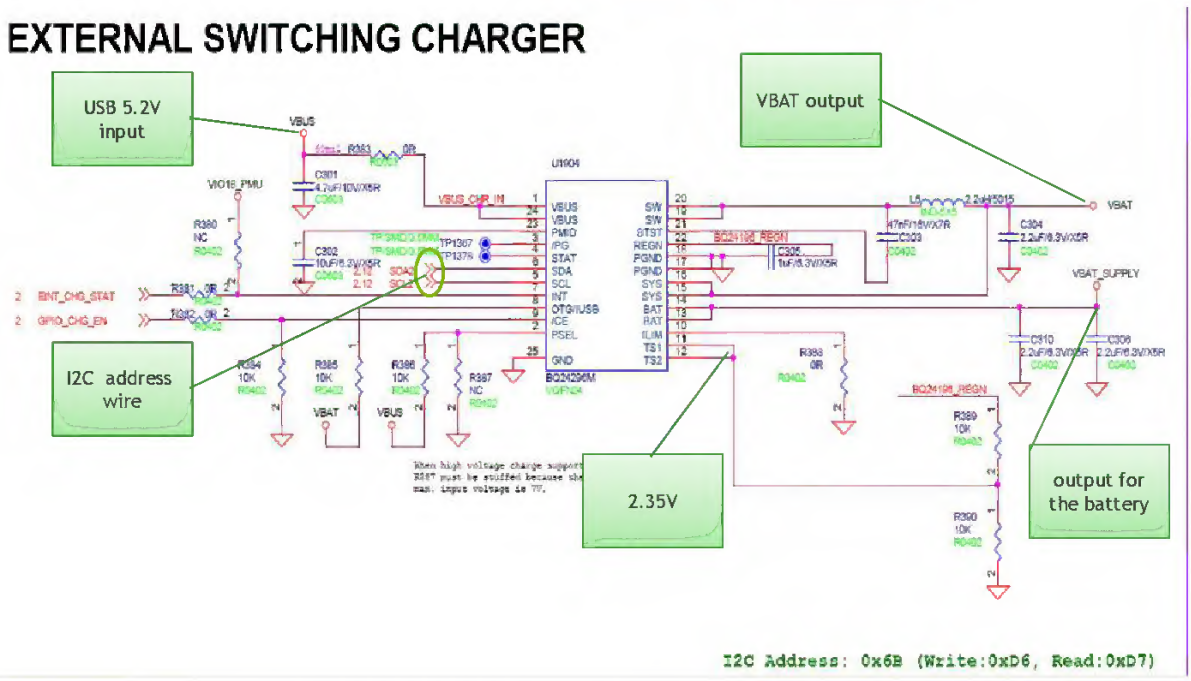
# 2、*Description about Circuit*

**A10L Block Diagram**

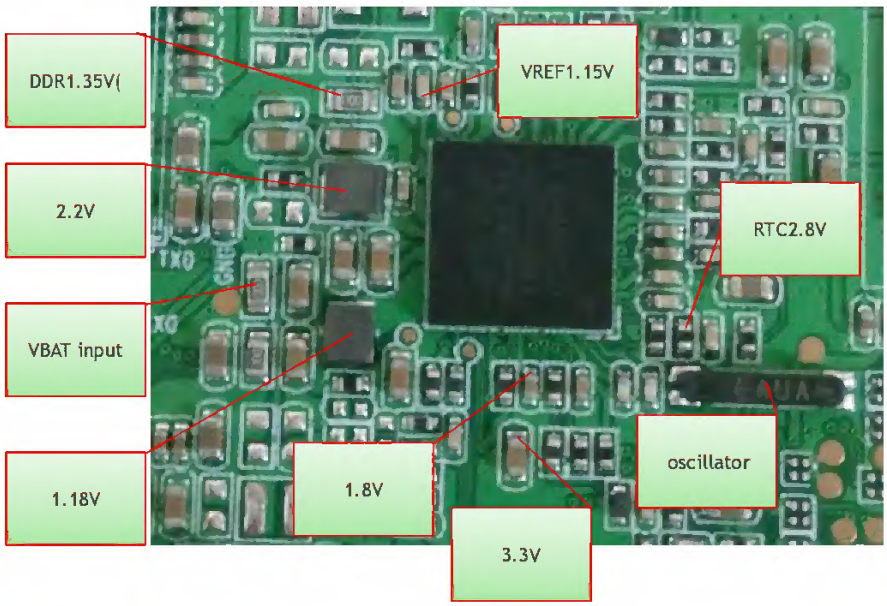


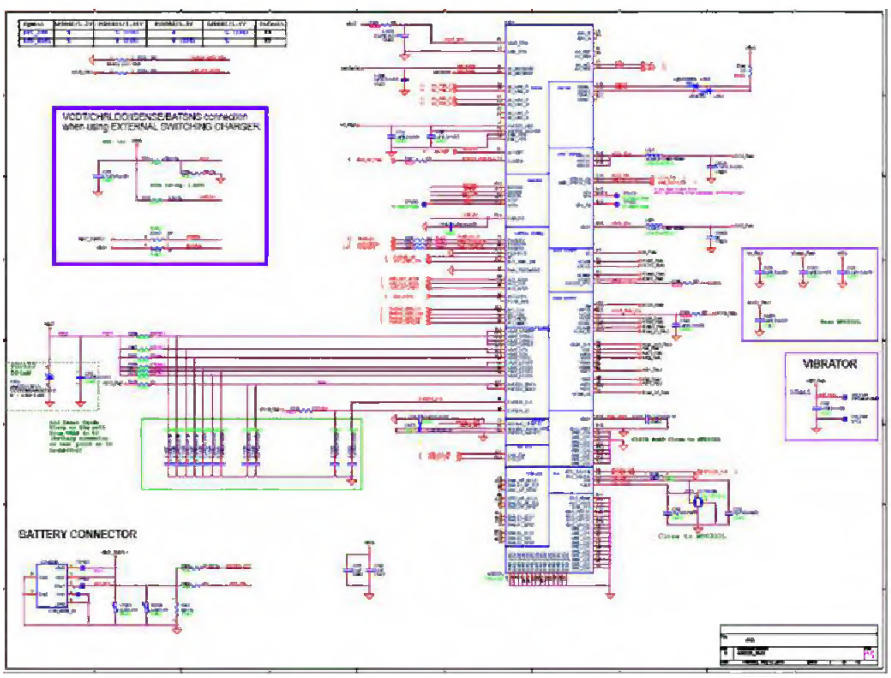
## *2.01 charging circuit*



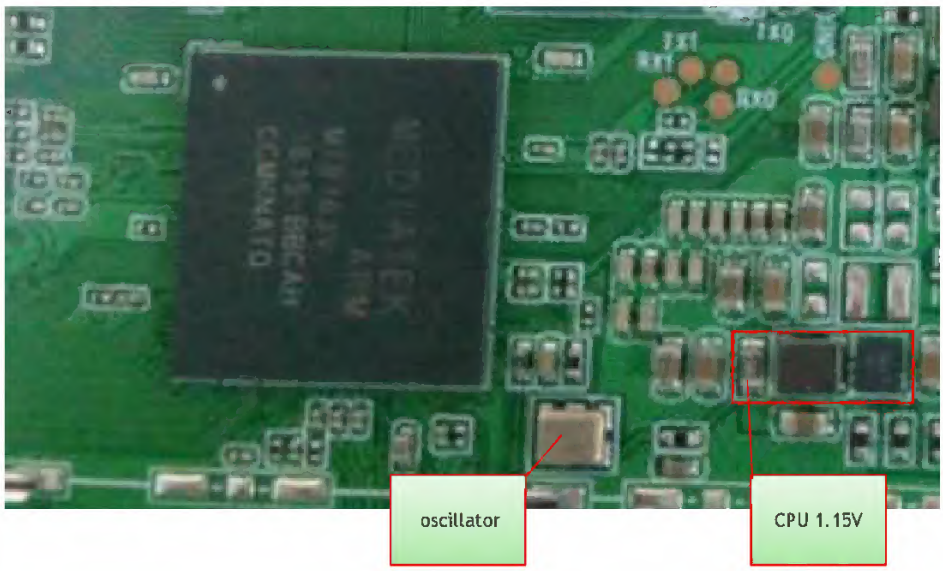
## 2.02 PMU Circuit

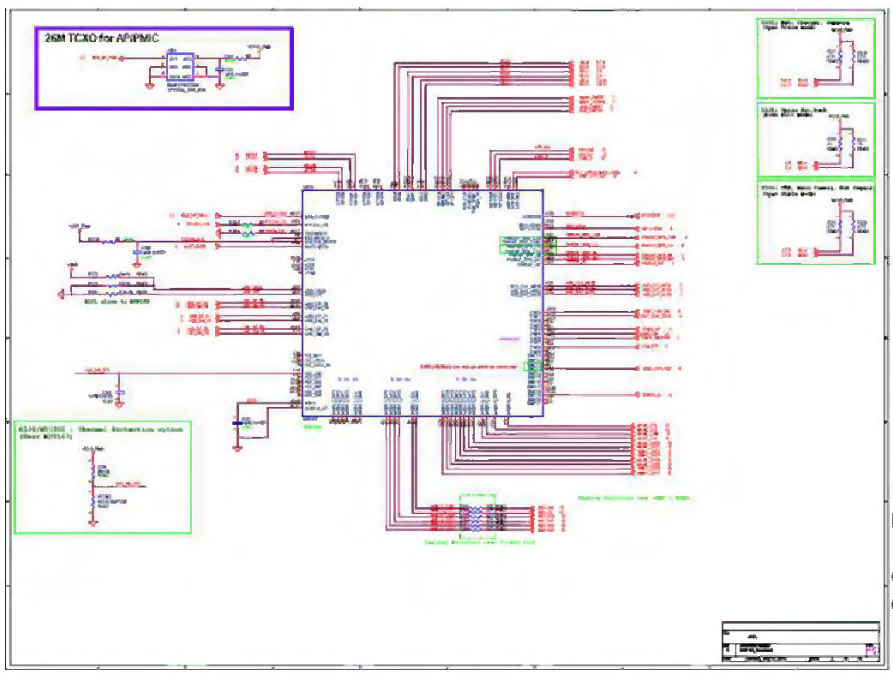



Please refer to the PDF file circuit diagram

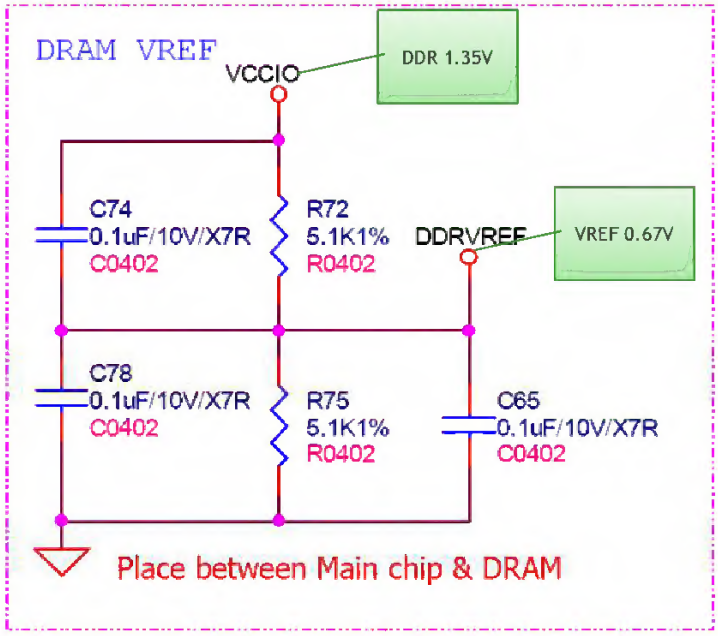
## *2.03 CPU Circuit*



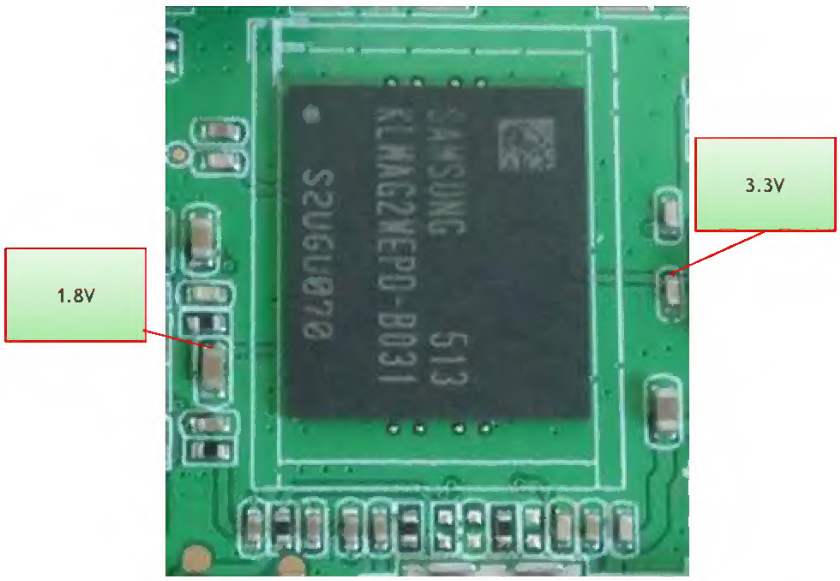



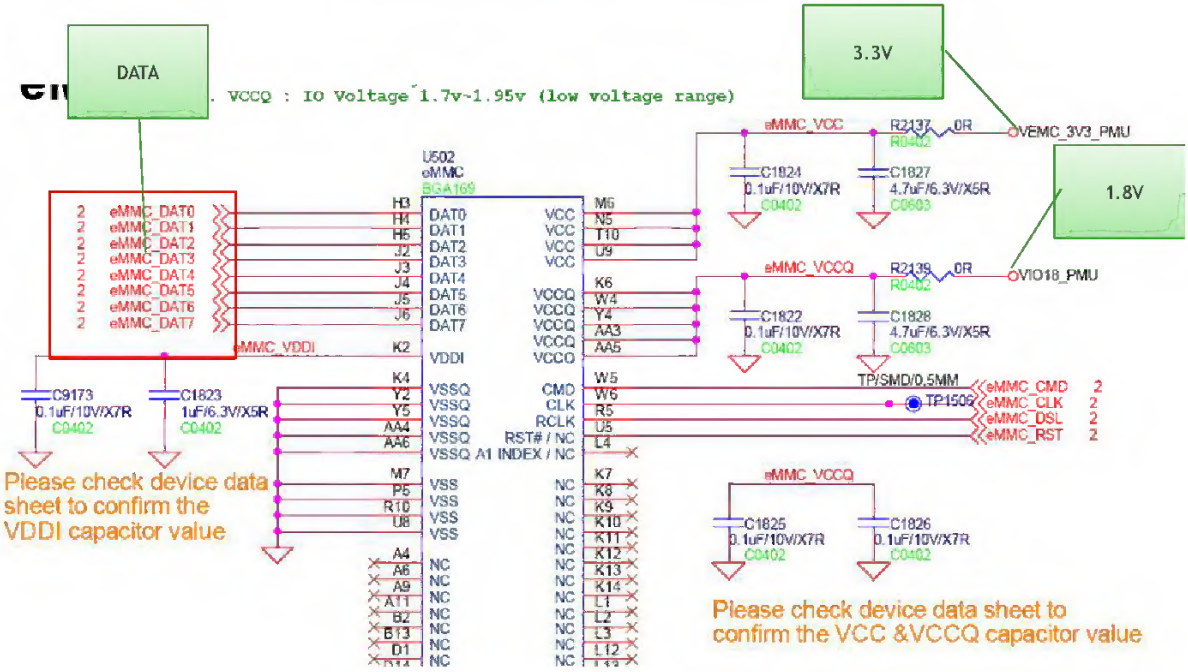

Please refer to the PDF file circuit diagram

## 2.04 DDR Circuit

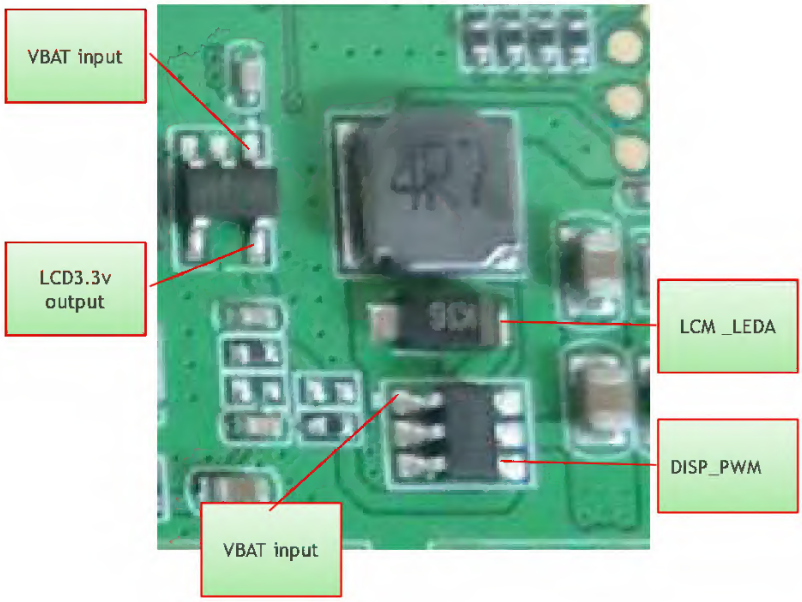


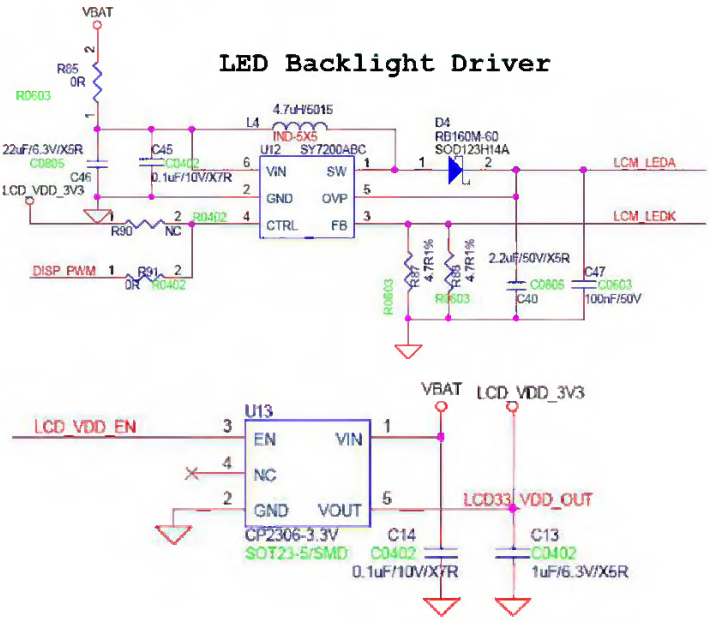
## 2.05 EMMC Circuit



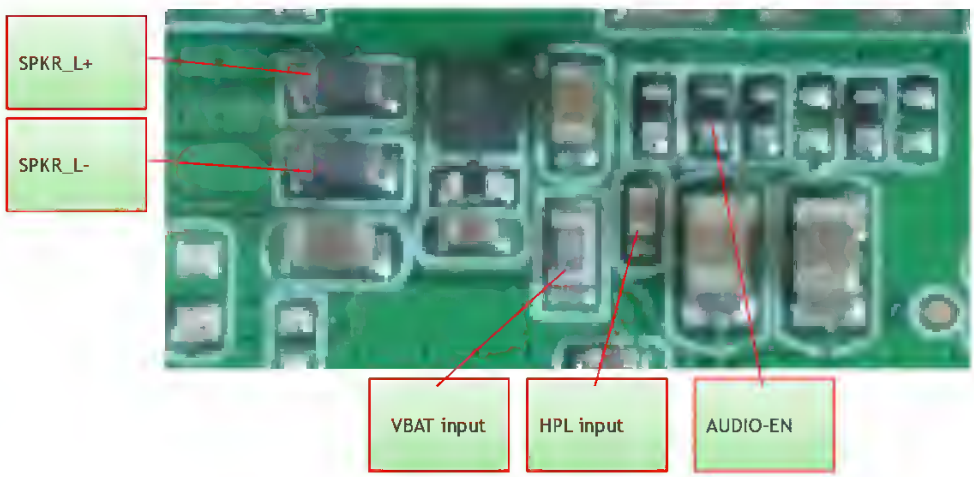



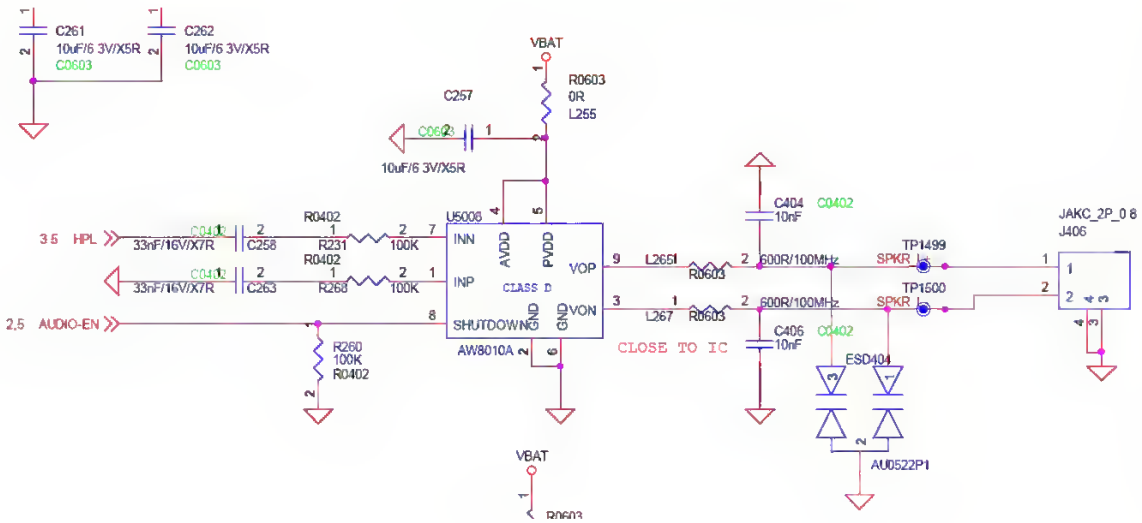
## *2.06 display screen Circuit*



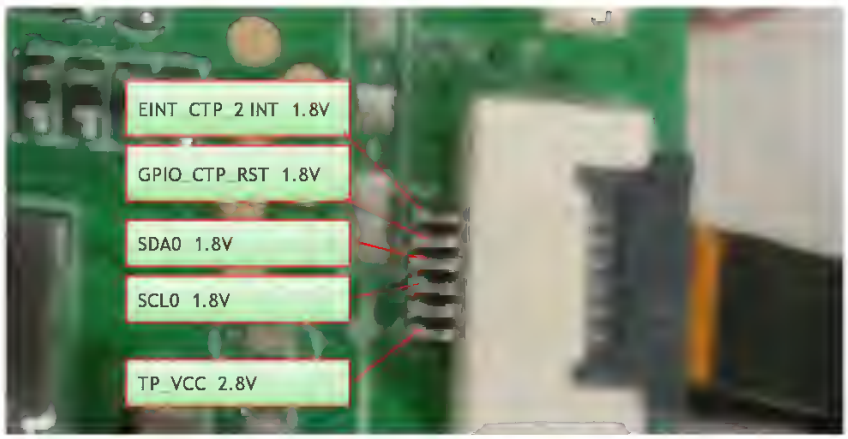



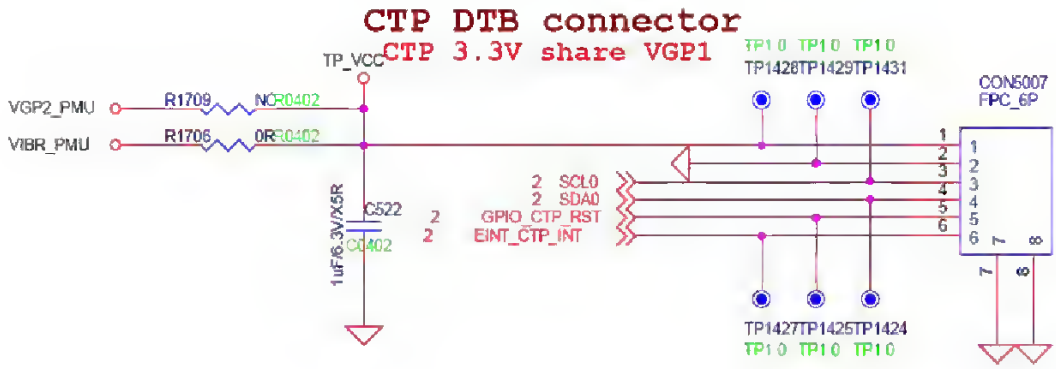
## 2.07 Speak Circuit



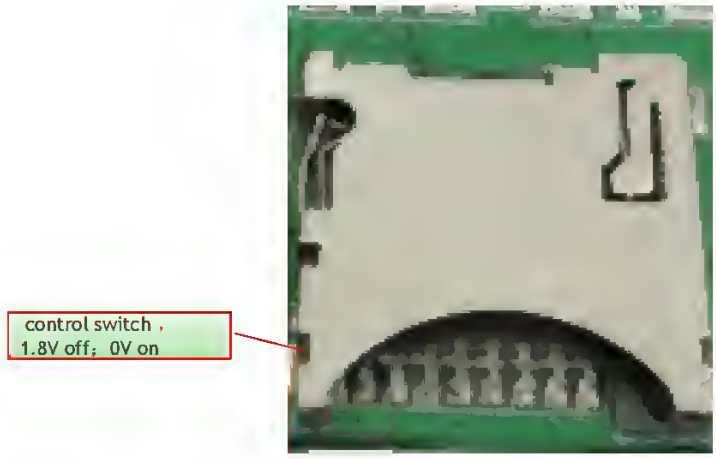



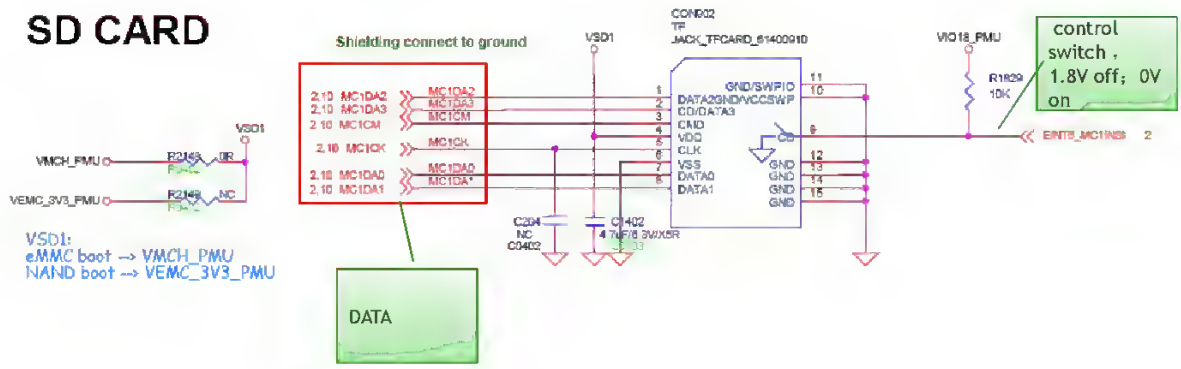
## 2.08TP Circuit



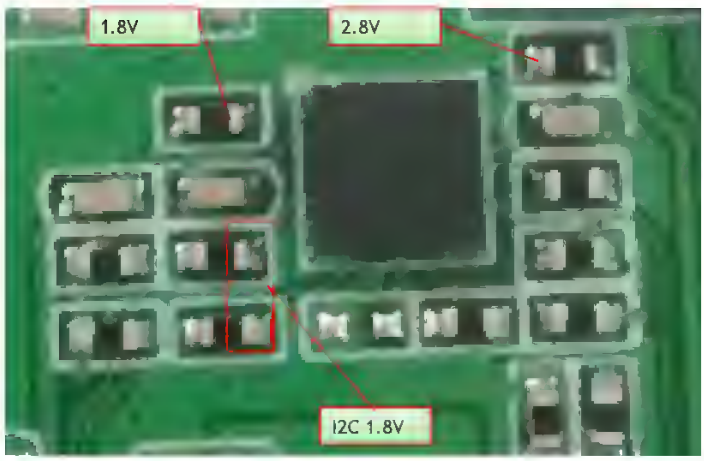



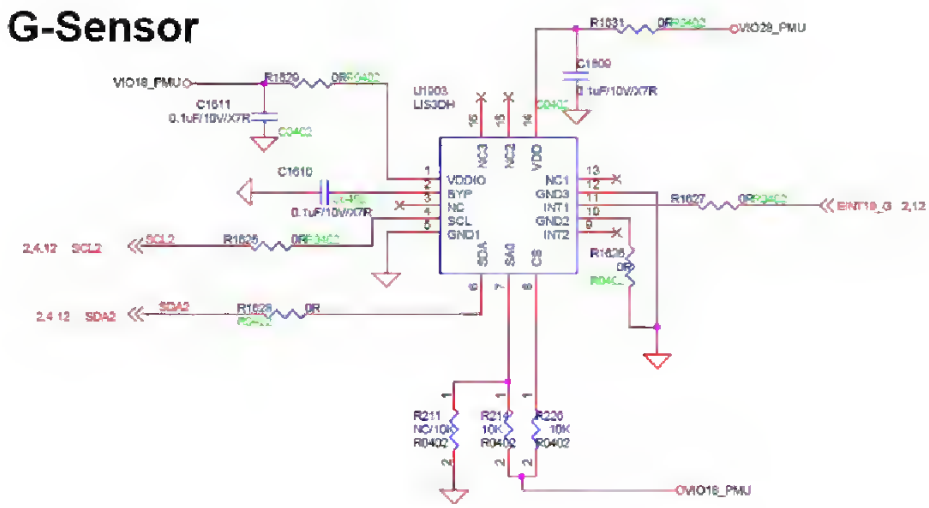
## 2.09 SD CARD Circuit



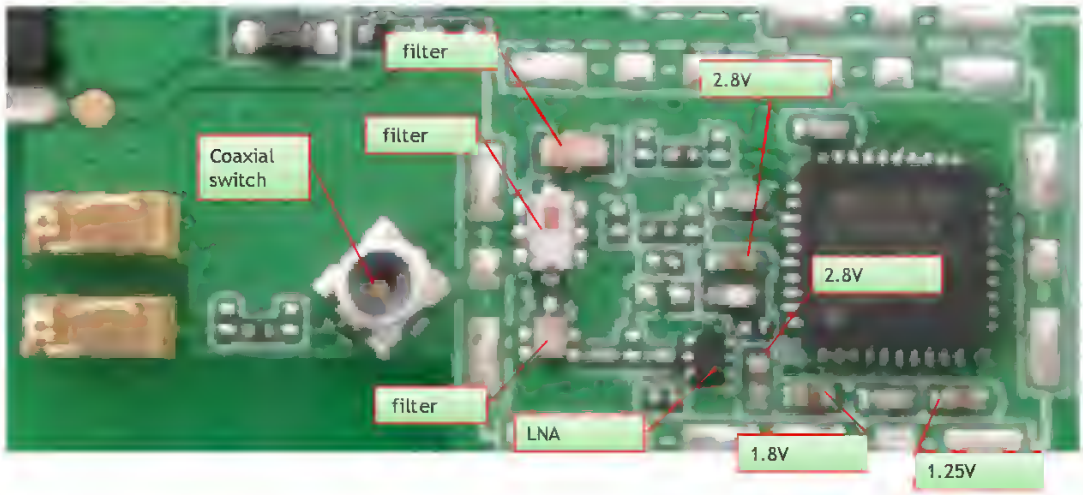



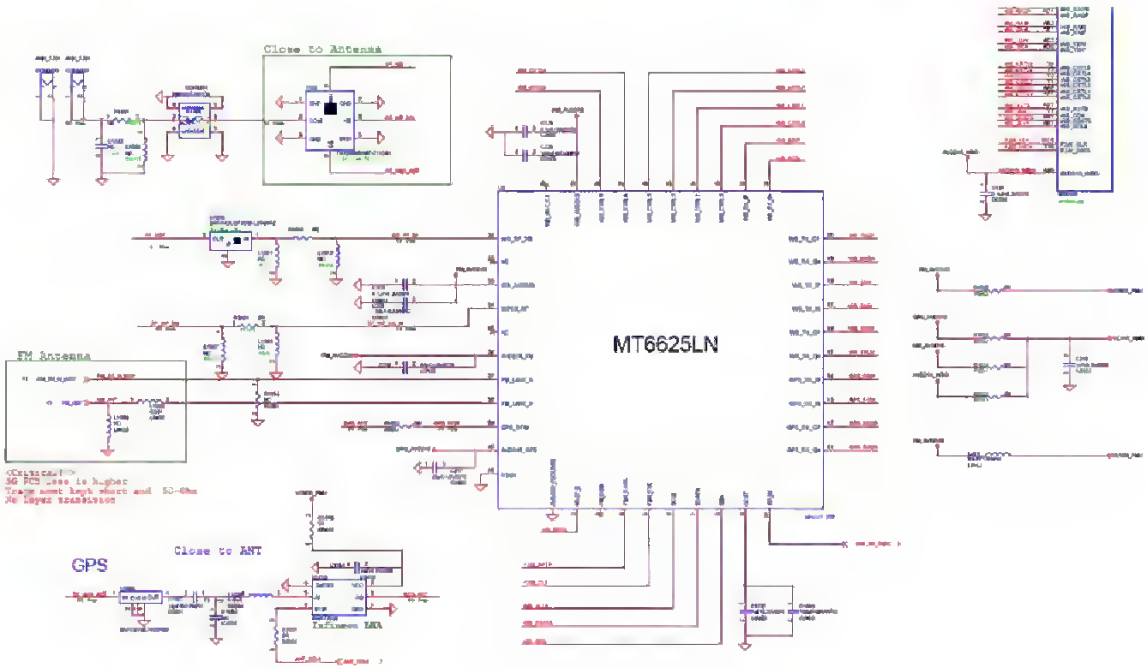
## 2.10 G-Sensor Circuit



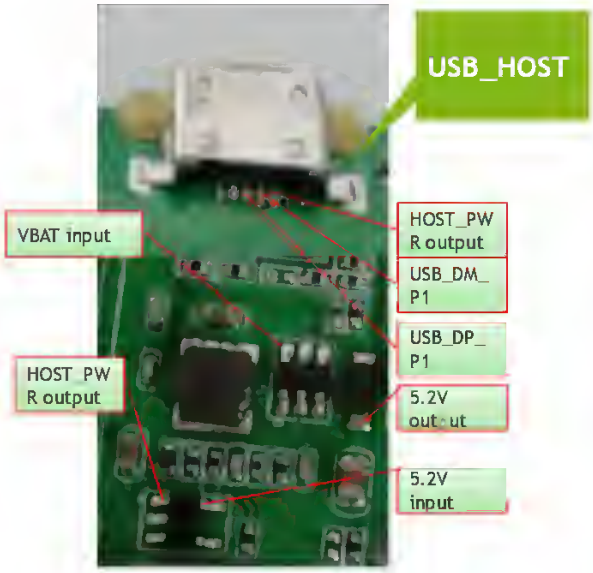



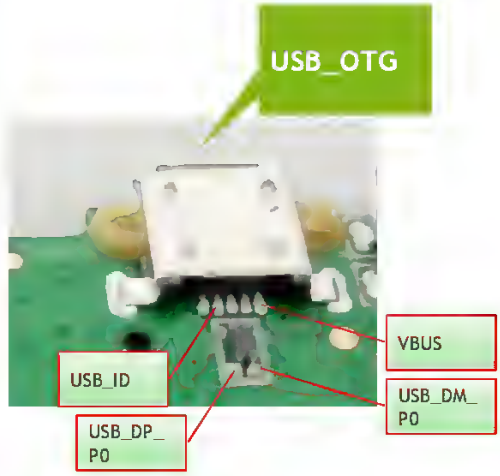
## 2.11 Wifi Circuit

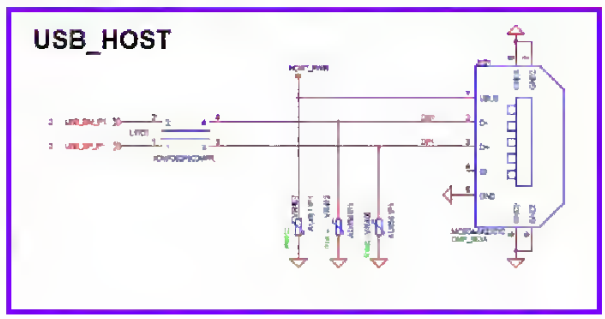


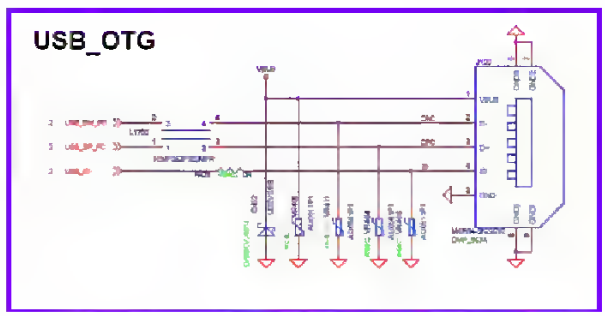



## 2.12 USB Circuit

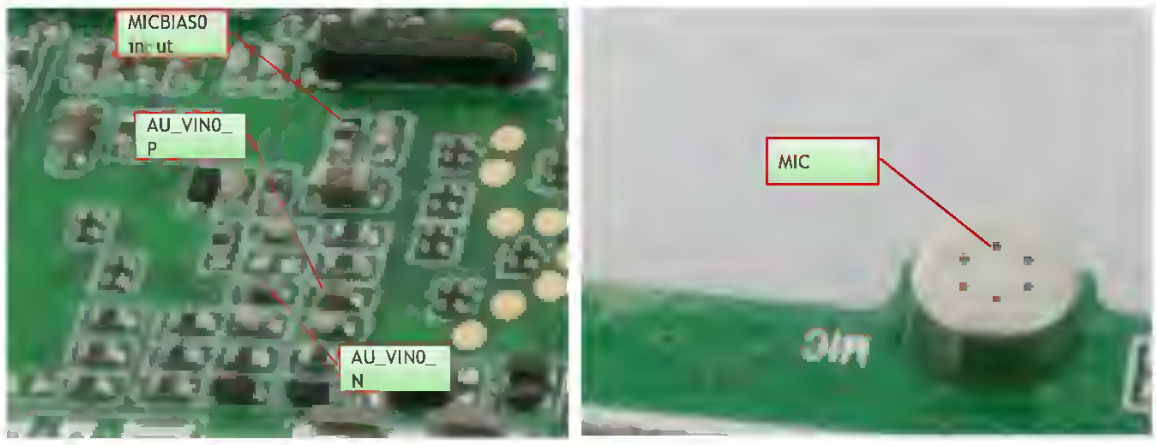


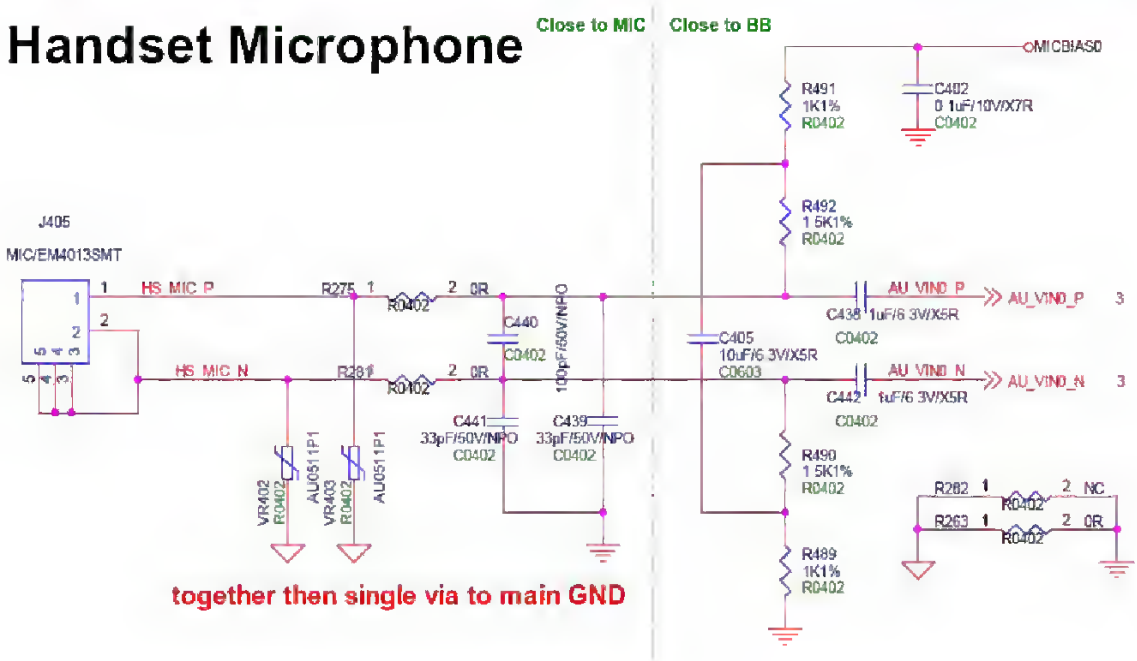



## 2.13 MIC Circuit



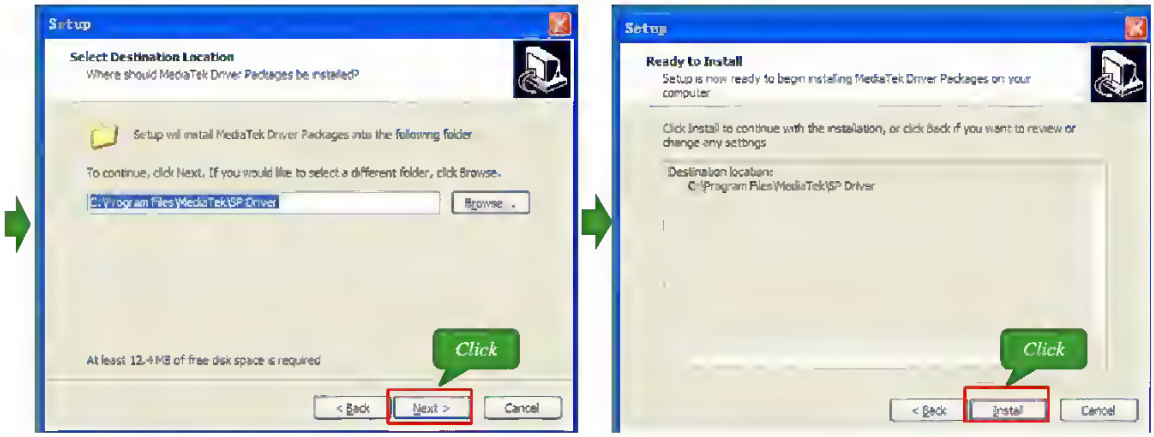



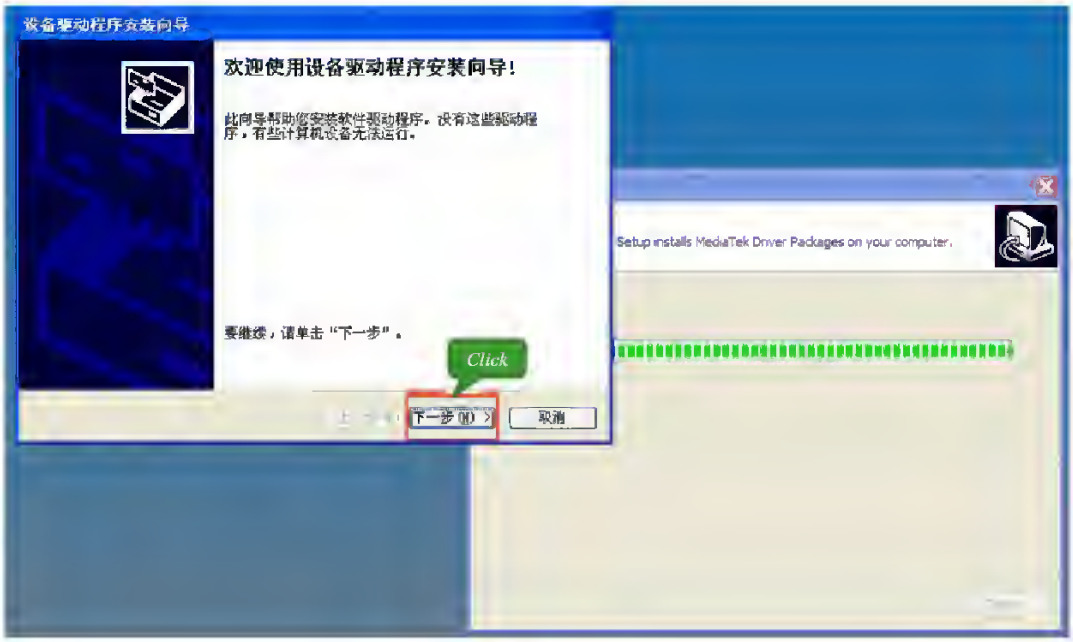
# 3、ID

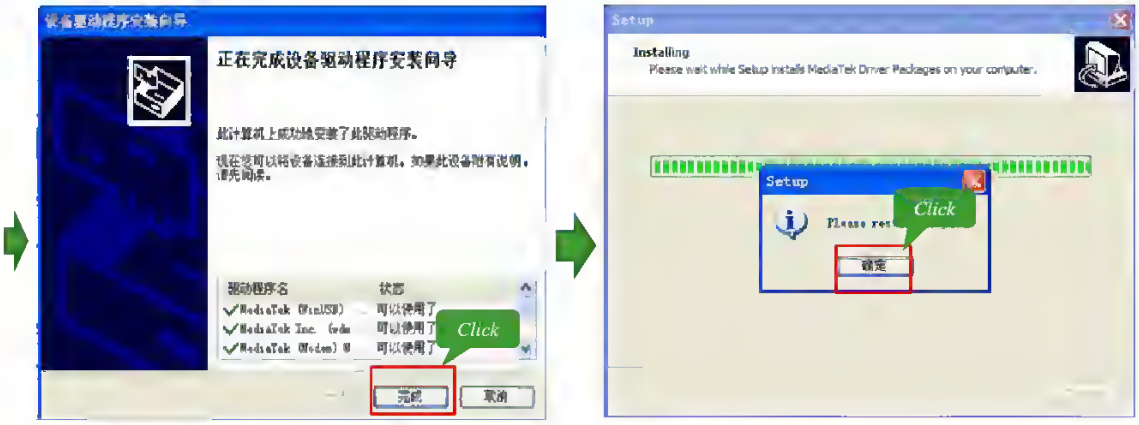
# 4、Upgrading Guidance

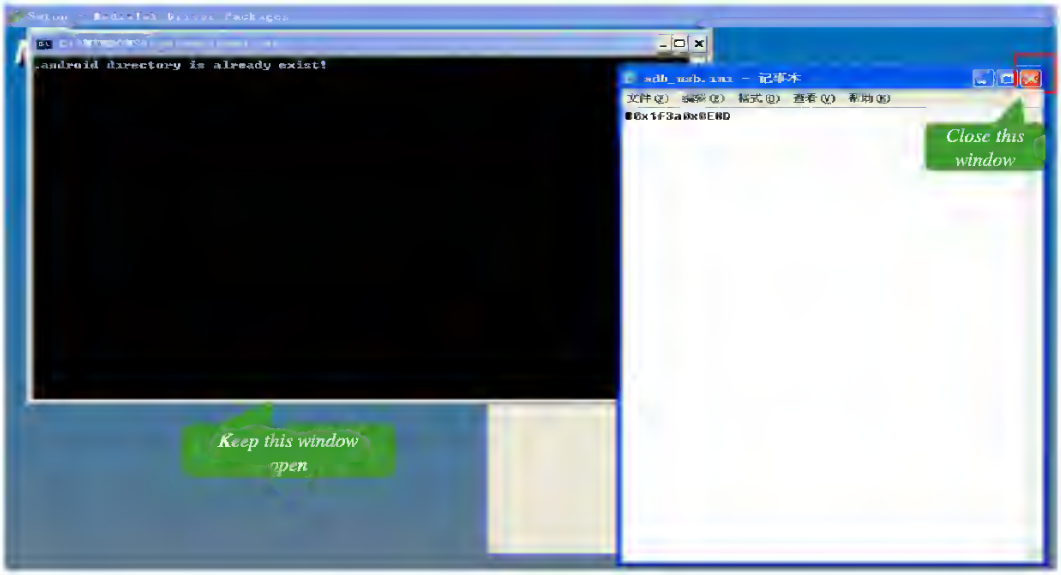
*1.To install Driver:*

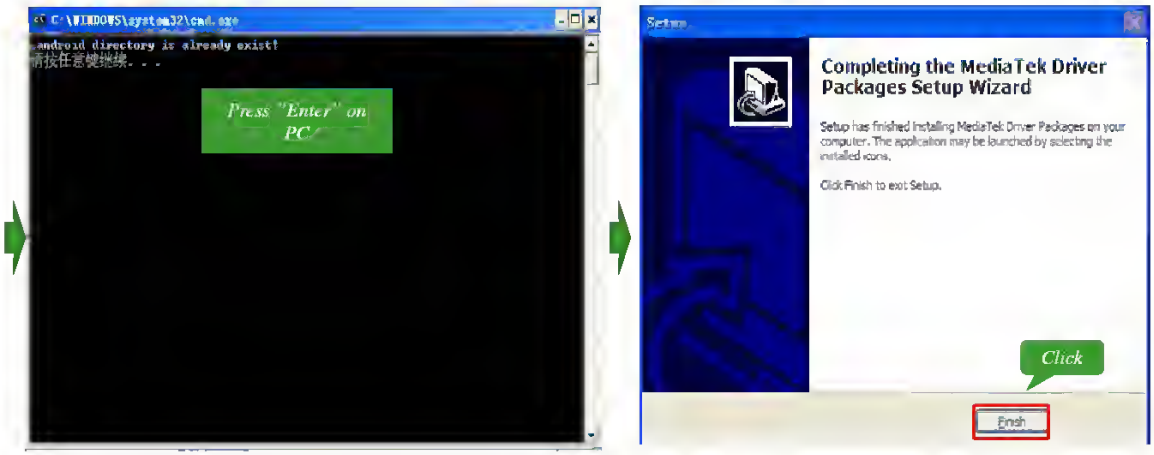
If above windows always pop up, please choose" always install this driver"
Press "Enter" on PC
Double click
MediaTek Driver Packages
Welcome to the MediaTek Driver Packages Setup Wizard
Click


Setup
Select Destination Location
Where should MediaTek Driver Packages be installed?
Setup will install MediaTek Driver Packages into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\MediaTek\SP Driver
Browse...
At least 12.4 MB of free disk space is required.
Click
< Back
Next >
Cancel
Setup
Ready to Install
Setup is now ready to begin installing MediaTek Driver Packages on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\MediaTek\SP Driver
Click
< Back
Install
Cancel

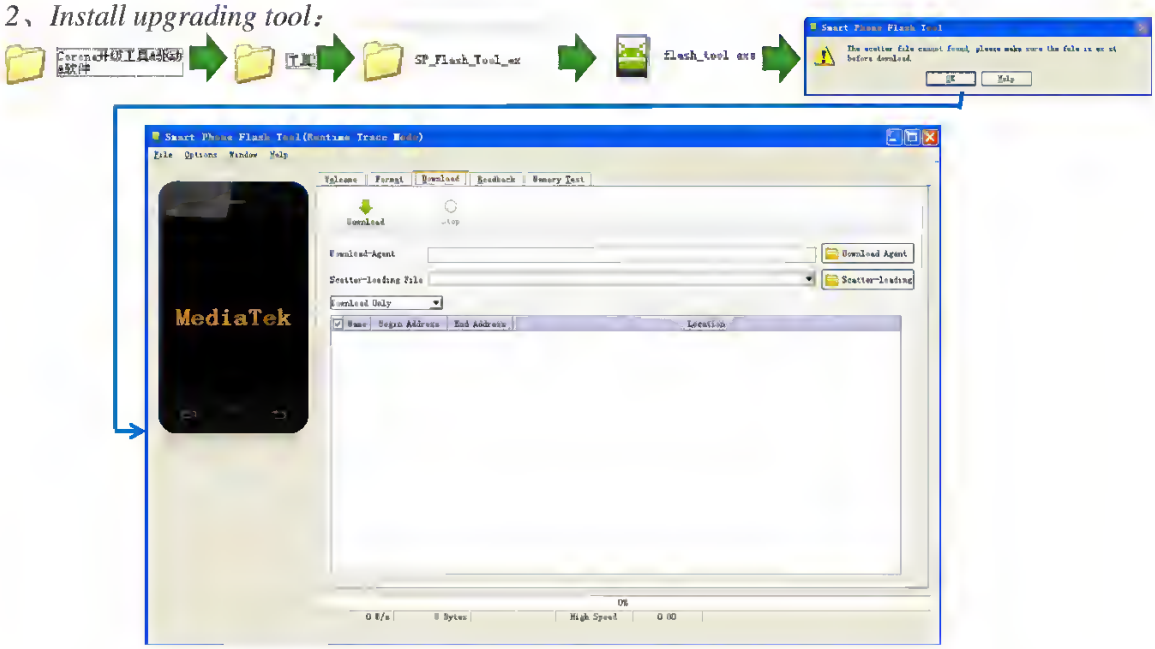

设备驱动程序安装向导
欢迎使用设备驱动程序安装向导!
此向导帮助您安装软件驱动程序。没有这些驱动程序，有些计算机设备无法运行。
要继续，请单击“下一步”。
Click
下一步(N) >
取消
Setup installs MediaTek Driver Packages on your computer.

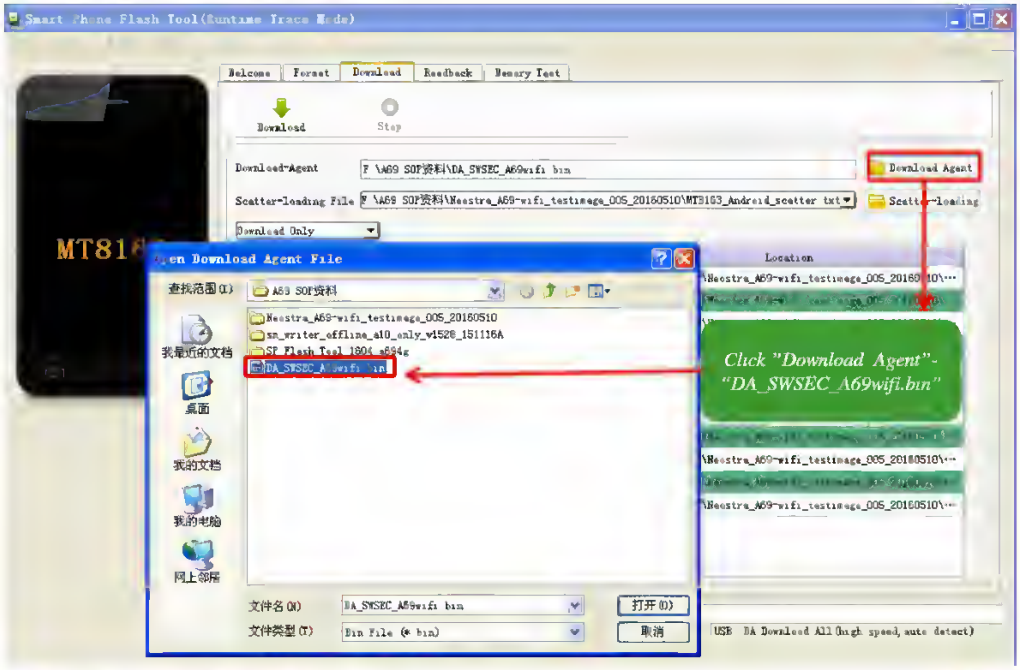

正在完成设备驱动程序安装向导
Click
Installing
Please wait while Setup installs MediaTek Driver Packages on your computer.
Setup
Click

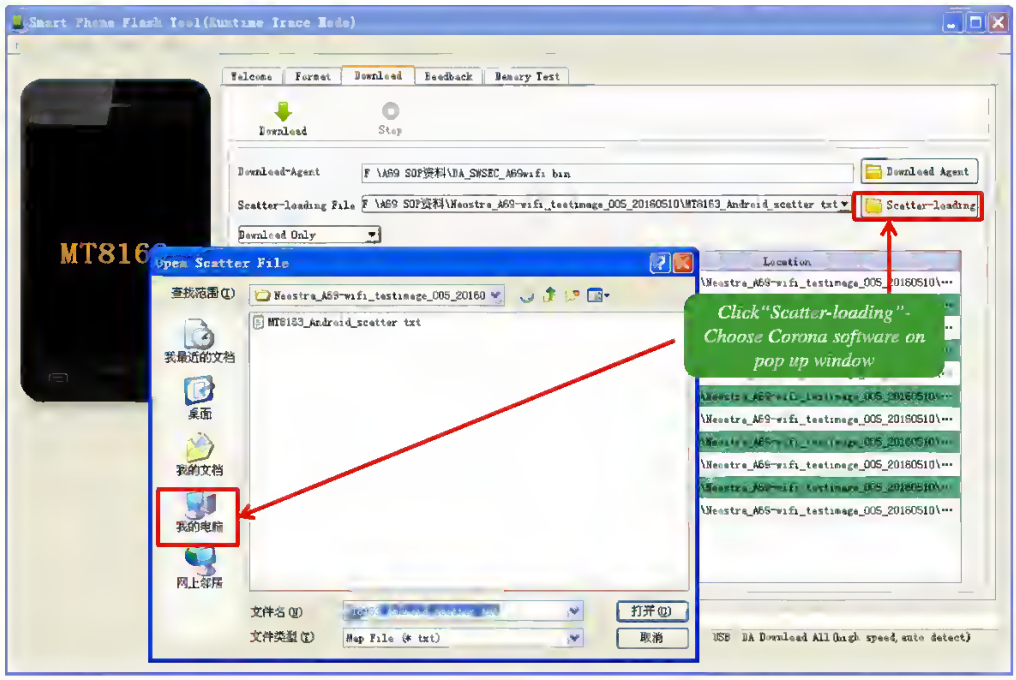

.android directory is already exist!
Keep this window open
Close this window

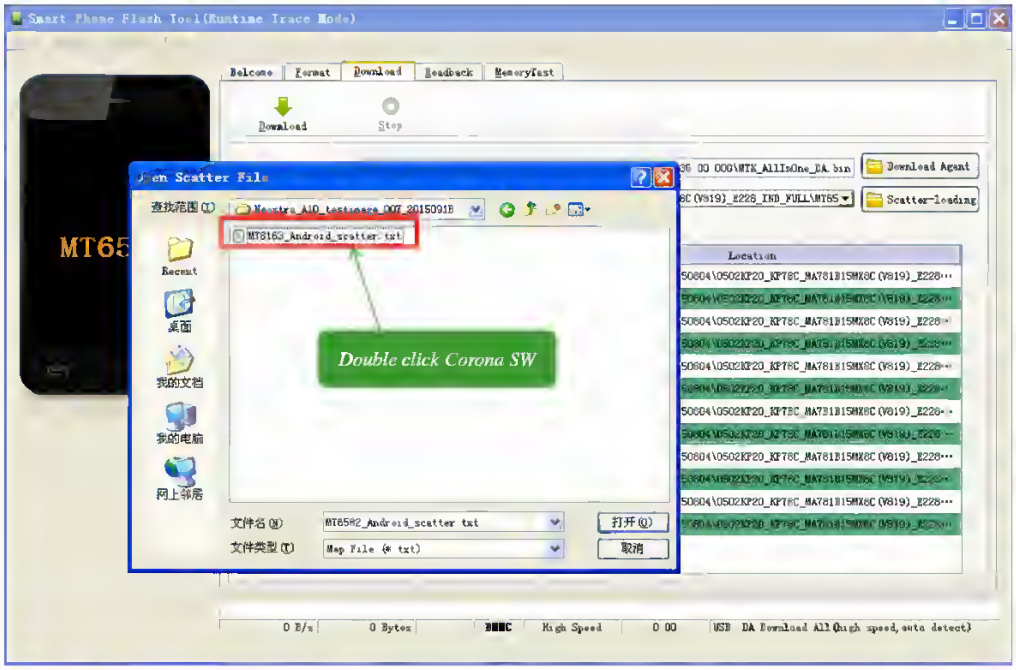

android directory is already exist!
请按任意键继续. . .
Press "Enter" on PC
Completing the MediaTek Driver Packages Setup Wizard
Setup has finished installing MediaTek Driver Packages on your computer. The application may be launched by selecting the installed icons.
Click Finish to exit Setup.
Click
Finish

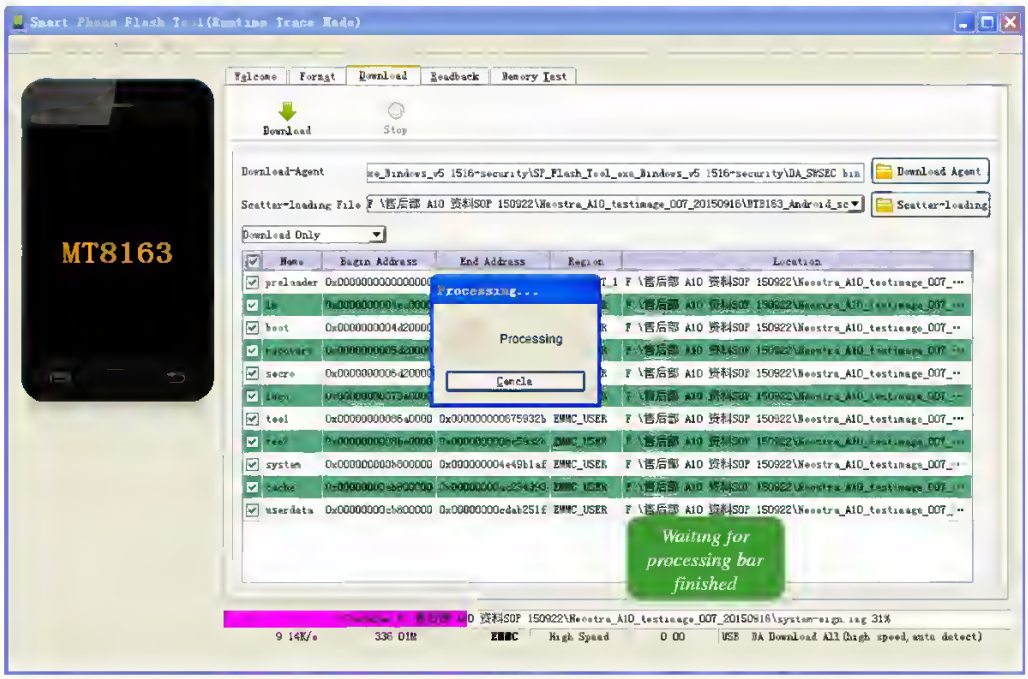
2、*Install upgrading tool:*

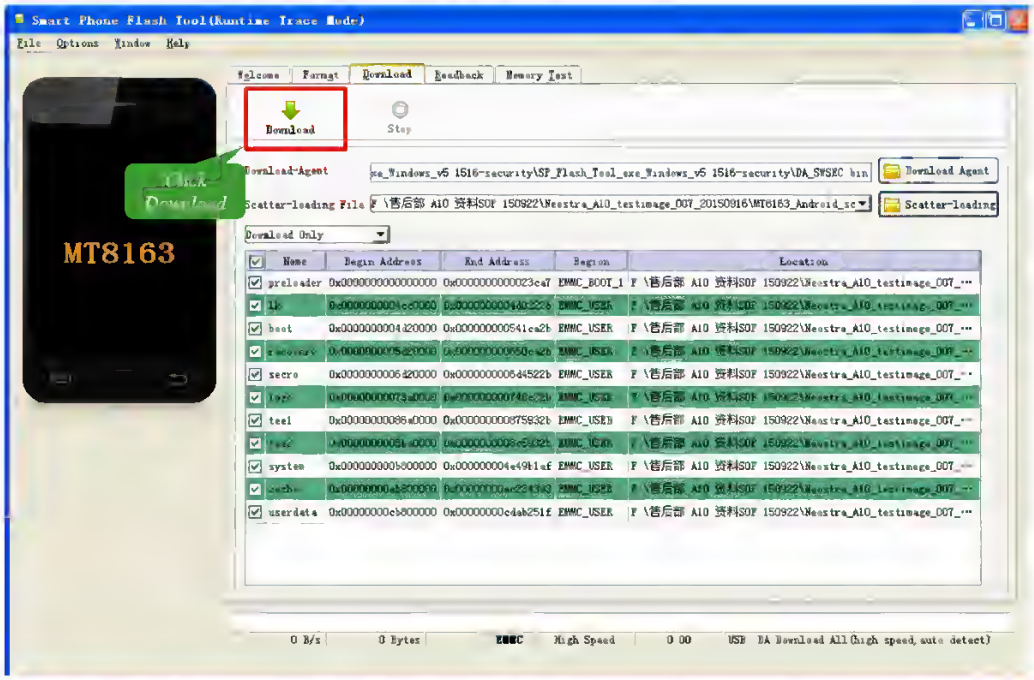


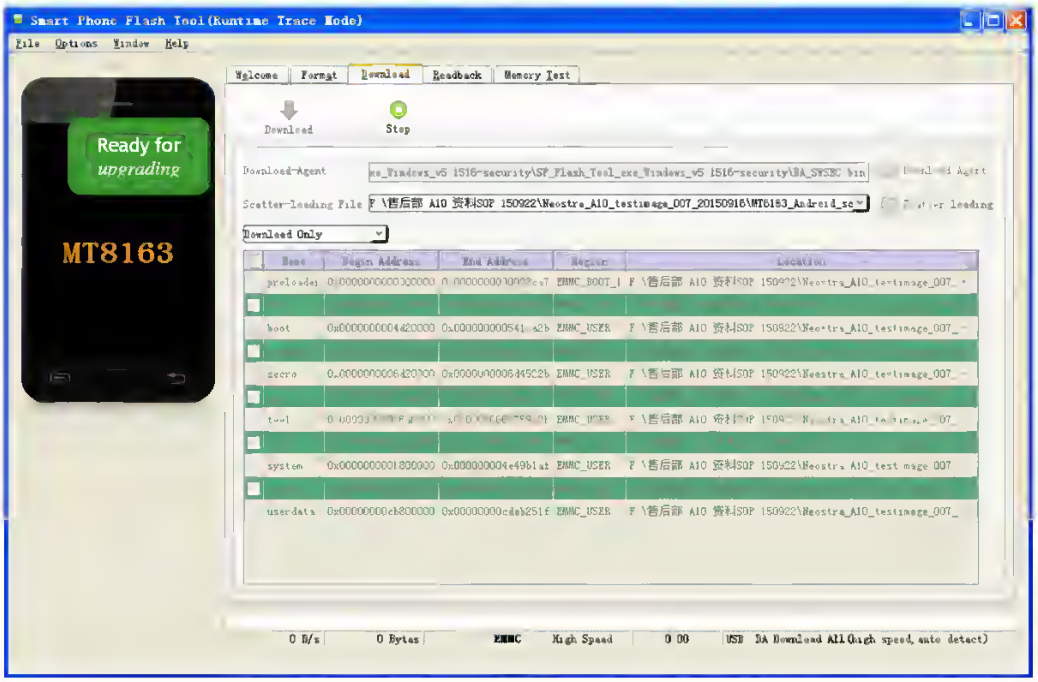

Smart Phone Flash Tool(Runtime Trace Mode)
Welcome
Format
Download
Readback
Memory Test
Download
Stop
Download-Agent
F \A69 SOF资料\DA_SWSEC_A69wifi bin
Download Agent
Scatter-loading File
F \A69 SOF资料\Neostra_A69-wifi_testimage_OOS_20160510\MT6163_Android_scatter txt
Scatter-loading
Download Only
Open Download Agent File
查找范围(I):
A69 SOF资料
Neostra_A69-wifi_testimage_OOS_20160510
sn_writer_offline_a10_only_v1526_151116A
SP_Flash_Tool_1804_x64x
DA_SWSEC_A69wifi bin
我最近的文档
桌面
我的文档
我的电脑
网上邻居
文件名(N):
DA_SWSEC_A69wifi bin
打开(O)
文件类型(T):
Bin File (*.bin)
取消
Location
USB: DA Download All (high speed, auto detect)
Click "Download Agent"-
"DA_SWSEC_A69wifi.bin"


Smart Phone Flash Tool(Runtime Trace Mode)
Welcome
Format
Download
Readback
Memory Test
Download
Stop
Download-Agent
F \A69 SOF资料\DA_SWSEC_A69wifi bin
Download Agent
Scatter-loading File
F \A69 SOF资料\Neostra_A69-wifi_testimage_OOS_20160510\MT6163_Android_scatter txt
Scatter-loading
Download Only
Open Scatter File
查找范围(I):
Neostra_A69-wifi_testimage_OOS_20160
MT6163_Android_scatter txt
我最近的文档
桌面
我的文档
我的电脑
网上邻居
文件名(N):
打开(O)
文件类型(T):
Map File (*.txt)
取消
Location
USB: DA Download All (high speed, auto detect)
Click"Scatter-loading"-
Choose Corona software on
pop up window


Smart Phone Flash Tool(Runtime Trace Mode)
Welcome
Format
Download
Readback
MemoryTest
Download
Stop
Open Scatter File
MT8163_Android_scatter.txt
Double click Corona SW
Download Agent
Scatter-loading
Location
文件名(N)
MT6582_Android_scatter.txt
打开(O)
文件类型(T)
Map File (*.txt)
取消
0 B/s
0 Bytes
EMMC
High Speed
0 00
USB DA Download All (high speed, auto detect)

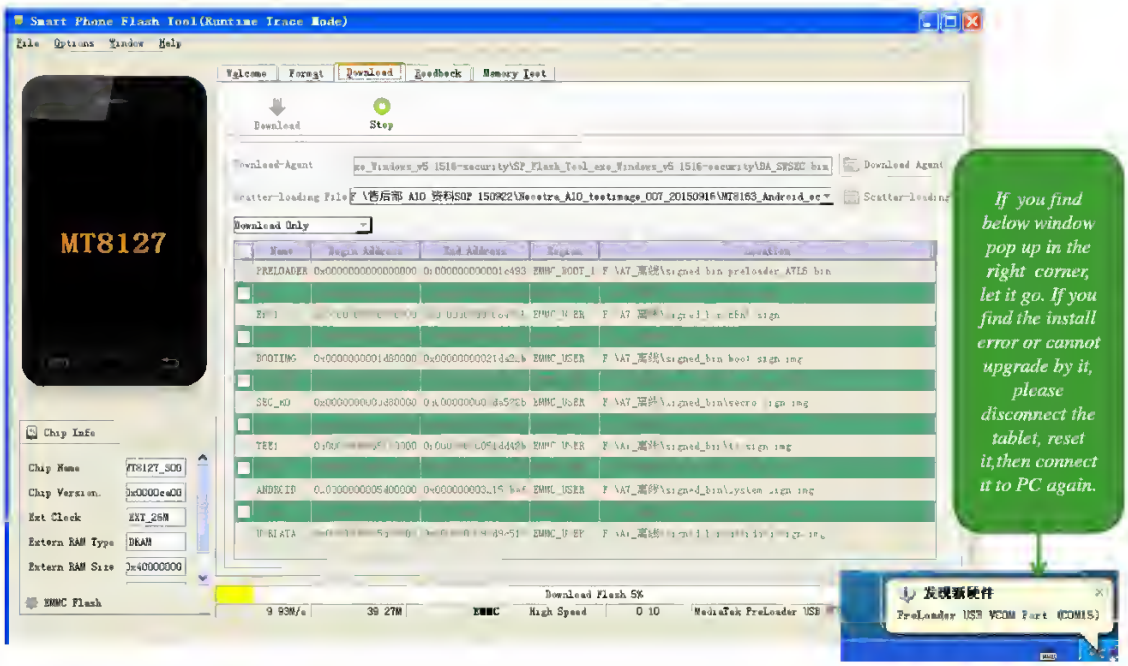

Smart Phone Flash Tool(Runtime Trace Mode)
Welcome
Format
Download
Readback
Memory Test
Download
Stop
Download-Agent
Download Agent
Scatter-loading File
Scatter-loading
Download Only
Name
Begin Address
End Address
Region
Location
Processing...
Processing
Cancle
Waiting for processing bar finished
9.14K/s
336 Dim
EMMC
High Speed
0 00
USB DA Download All (high speed, auto detect)

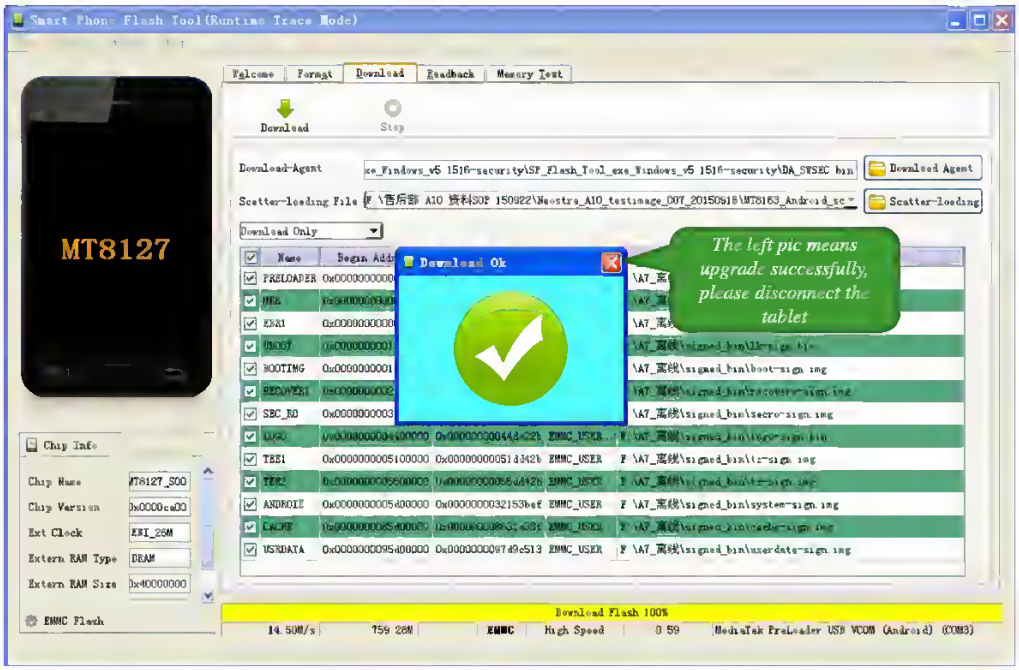

Smart Phone Flash Tool(Runtime Trace Mode)
File Options Window Help
Welcome Format Download Readback Memory Test
Download
Stop
Click Download
MT8163
Download-Agent
Scatter-loading File
Download Agent
Scatter-loading
Download Only
Name Begin Address End Address Region Location
preloader
boot
recovery
secro
tee1
system
userdata
0 B/s 0 Bytes EMMC High Speed 0.00 USB DA Download All (high speed, auto detect)

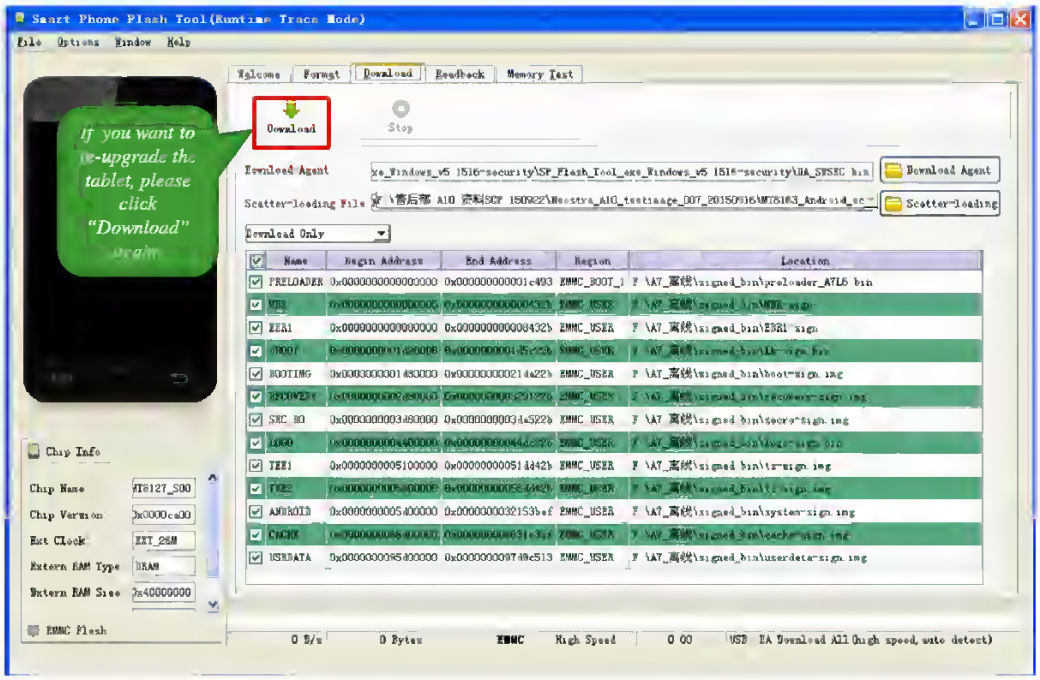

Smart Phone Flash Tool(Runtime Trace Mode)
File Options Window Help
Welcome Format Download Readback Memory Test
Download
Stop
Ready for upgrading
MT8163
Download-Agent
Scatter-loading File
Download Only
0 B/s 0 Bytes EMMC High Speed 0.00 USB DA Download All (high speed, auto detect)

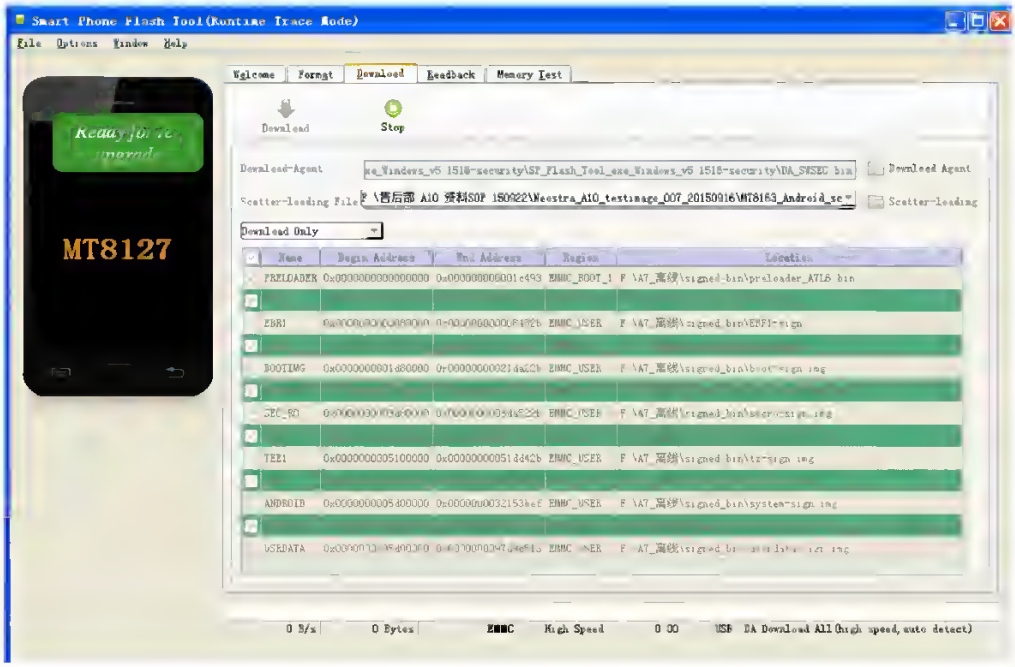
*Power off*

*Conecct PC with USB cable*


Smart Phone Flash Tool(Runtime Trace Mode)
File Options Window Help
Welcome Format Download Readback Memory Test
Download
Stop
MT8127
Download Only
Chip Info
Chip Name
Chip Version
Ext Clock
Extern RAM Type
Extern RAM Size
EMMC Flash
Download Flash 5%
High Speed
If you find below window pop up in the right corner, let it go. If you find the install error or cannot upgrade by it, please disconnect the tablet, reset it,then connect it to PC again.
发现新硬件
PreLoader USB VCOM Port (COM15)

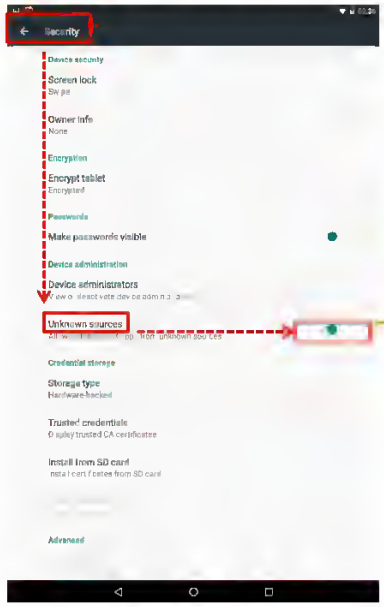

Smart Phone Flash Tool(Runtime Trace Mode)
MT8127
Download Ok
The left pic means upgrade successfully, please disconnect the tablet


Smart Phone Flash Tool(Runtime Trace Mode)
If you want to re-upgrade the tablet, please click "Download" again

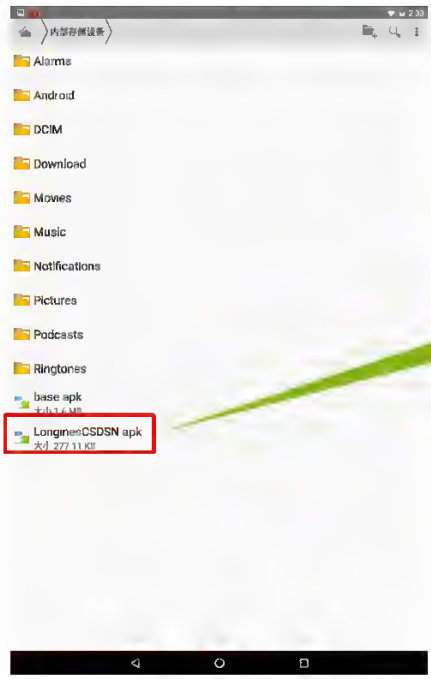

Smart Phone Flash Tool(Runtime Trace Mode)
File Options Window Help
Welcome Format Download Readback Memory Test
Download
Stop
Download-Agent
Download Agent
Scatter-loading File
Scatter-loading
Download Only
Name
Begin Address
End Address
Region
Location
PRELOADER
EBR1
BOOTIMG
TEE1
ANDROID
USRDATA
MT8127
0 B/s
0 Bytes
EMMC
High Speed
0:00
USB DA Download All (high speed, auto detect)

# 5、*The longines CODSN SOP*

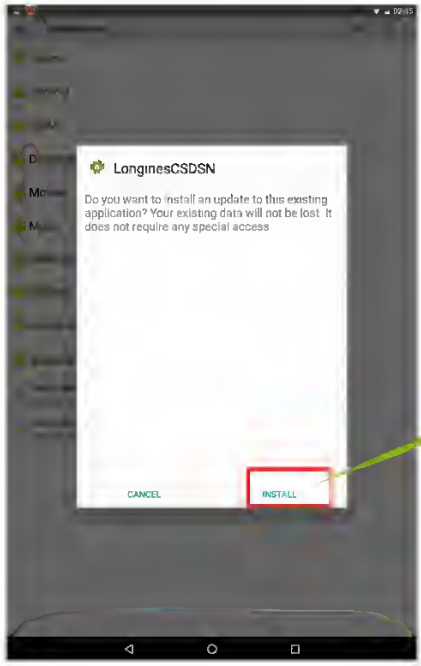
installation instructions




Setting/security/unkn own sources/on



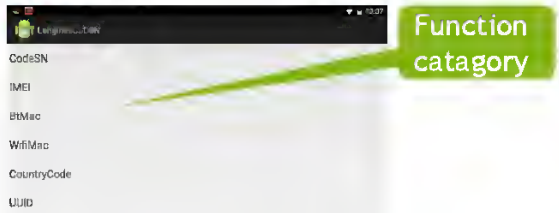

Copy this file to Tablet root directory


LonginesCSDSN
Do you want to install an update to this existing application? Your existing data will not be lost. It does not require any special access
CANCEL
INSTALL

Click "Install"

Open it after installed

function description




**1、CodeSN**

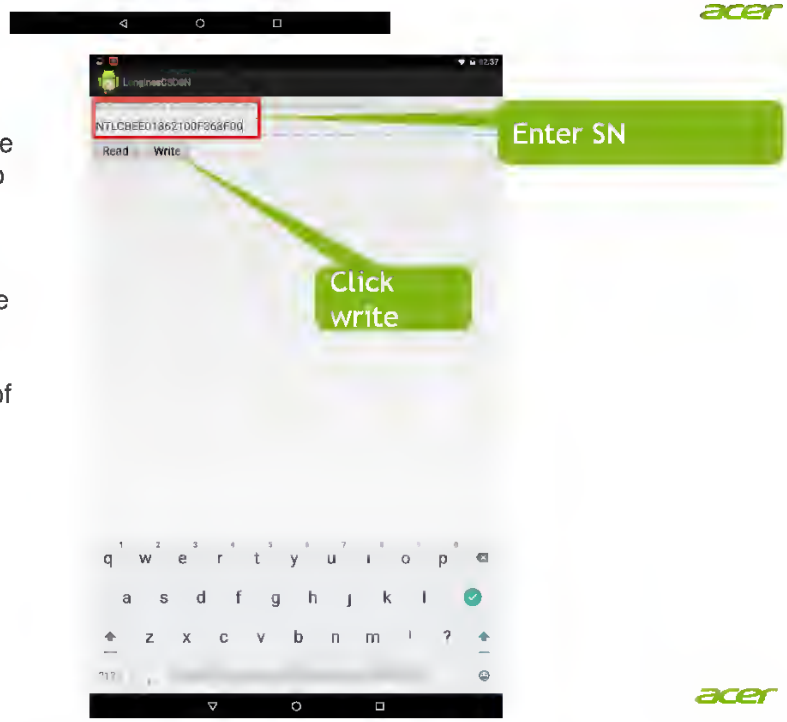
It can read and write.

If not set the value of the new machine, access to the value is null.

write CodeSN rules: CODESN only allowed numbers and uppercase letters,the length is 22.

Click on write:

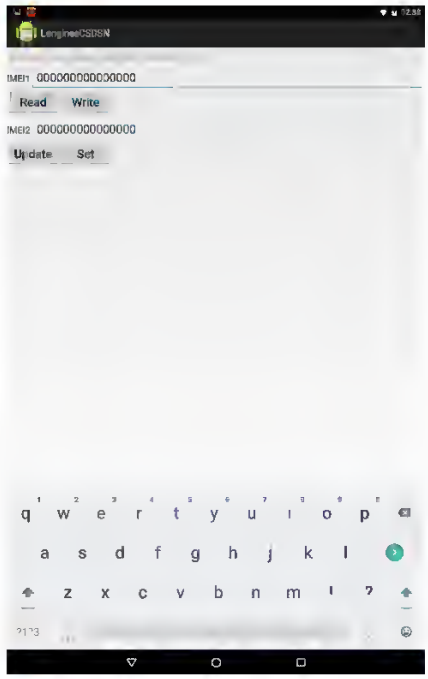
If write successful hint of "set successfully.", otherwise prompt "set failed"



# JetfireHD no IMEI, so no need to write it.

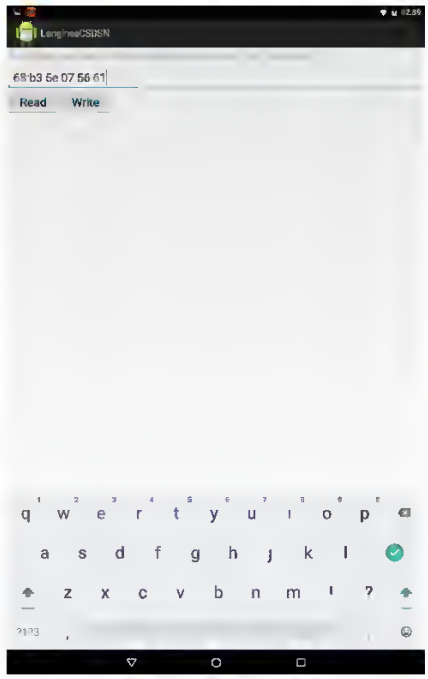
**2、IMEI**

If not set the value of the new machine, access to the value is 000000000000000.
write CodeSN rules:
IMEI only allowed numbers ,the length is 15.
Click on write:
If write successful hint of “set successfully.”, otherwise prompt “set failed”



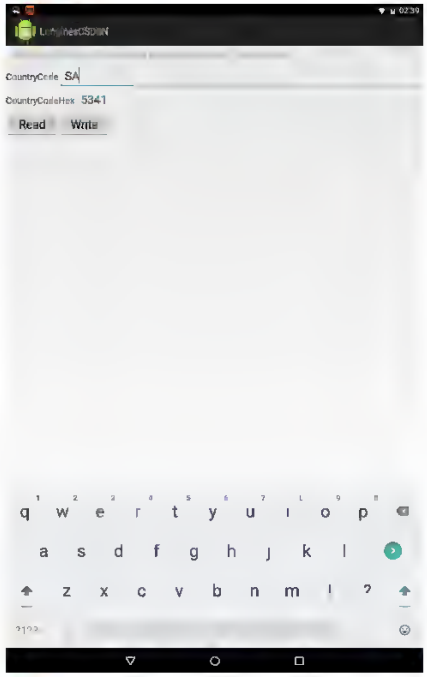

**3、BtMac/WifiMac**

If not set the value of the new machine, access to the value is The system's default value.
write CodeSN rules:
BtMac/WifiMac only allowed numbers and letters.(example,C0:98:79:05:C5:33)
Click on write:
If write successful hint of “set successfully.”, otherwise prompt “set failed”



**4、CountryCode**

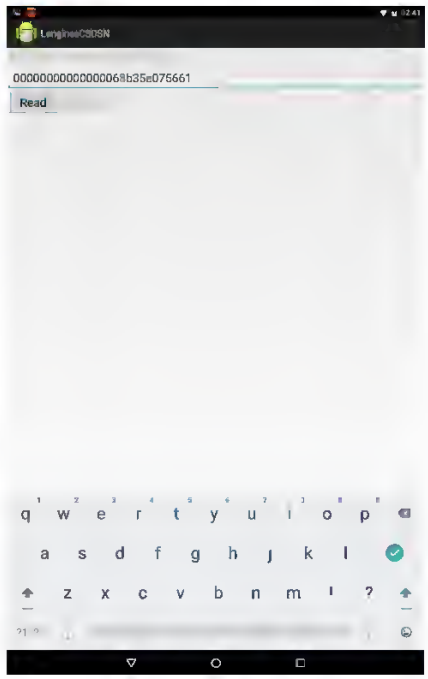
If not set the value of the new machine, access to the value is null.
write CodeSN rules: CountryCode only uppercase letters,the length is 2.(example,CN)
Click on write:
If write successful hint of “set successfully.”, otherwise prompt “set failed”



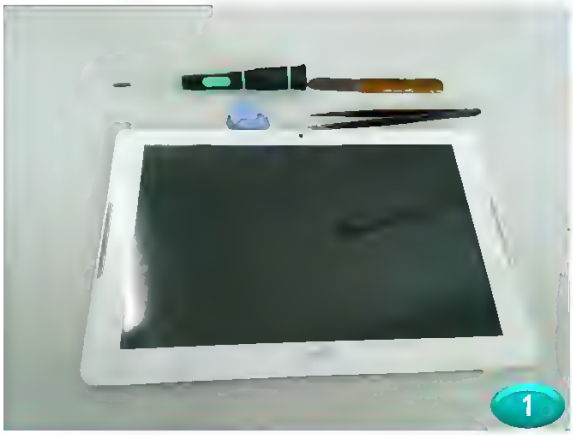



**5、UUID**

If not set the value of the new machine, access to the value is IMEI+ BtMac
It can’t write.
If you want to write, just set IMEI and BtMac.



# 6、 *Disassembling*




Get ESD preparation

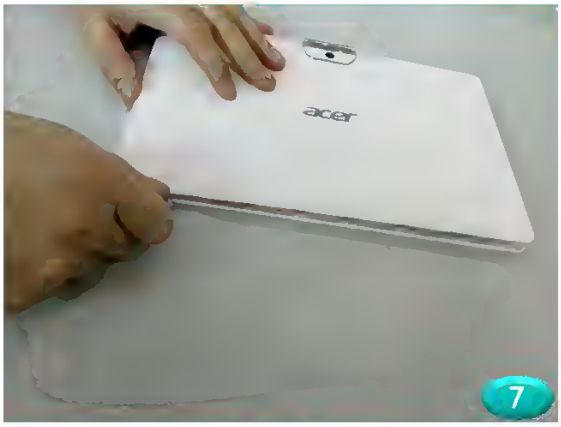
Open cover

Pick out screw

Insert Flyer

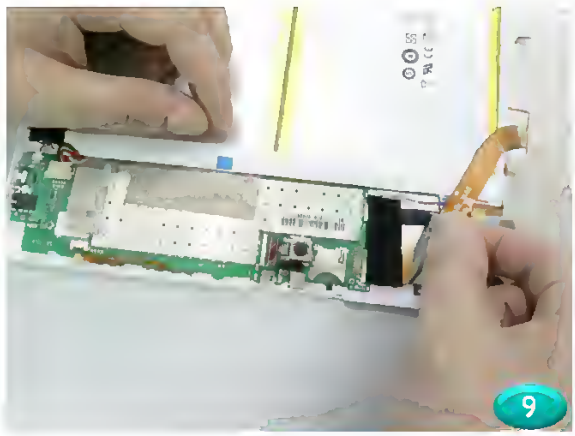
Clockwise slip

Clockwise slip

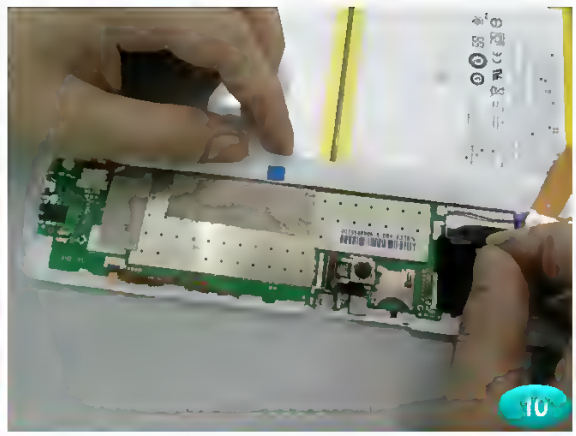



Until all open

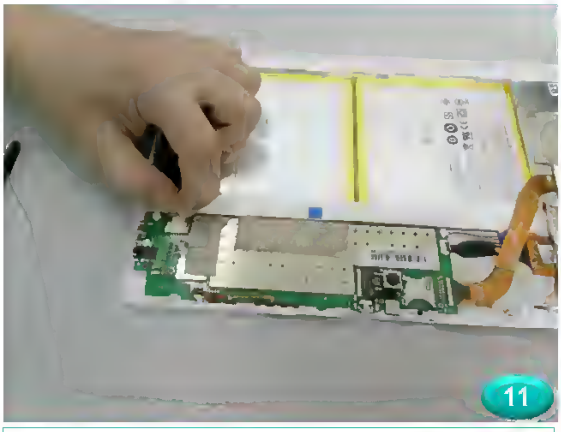
Pick out housing



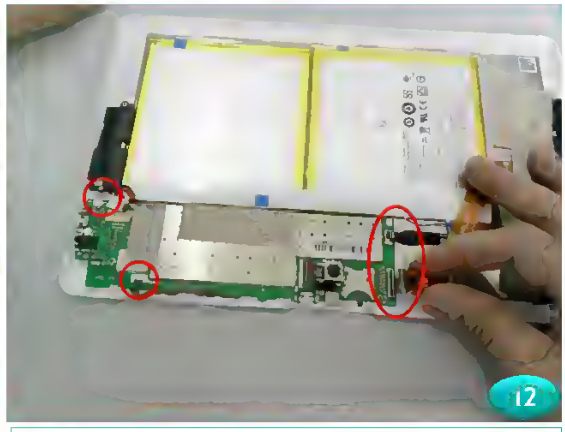

Tear down electric cloth



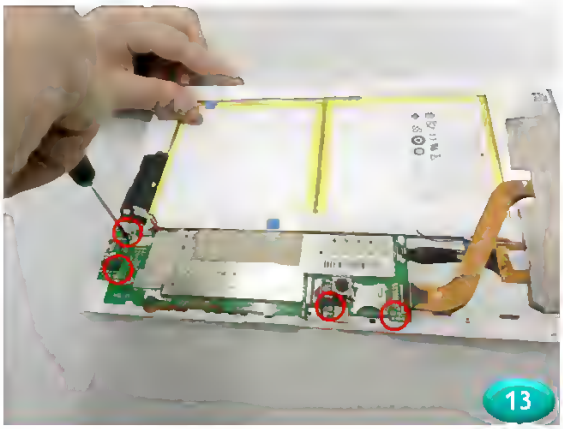

Tear down glue



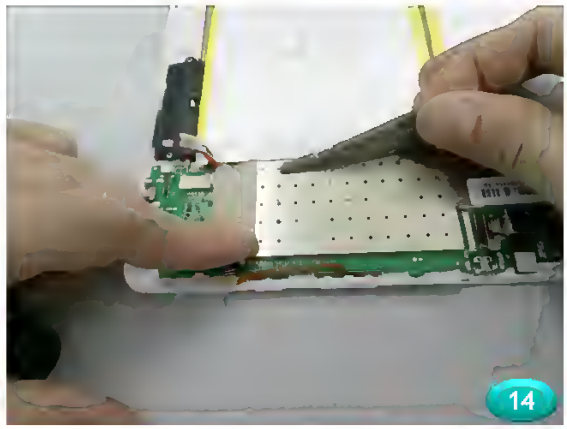

Pick out battery connector




Pick out battery connector




Pick our screw

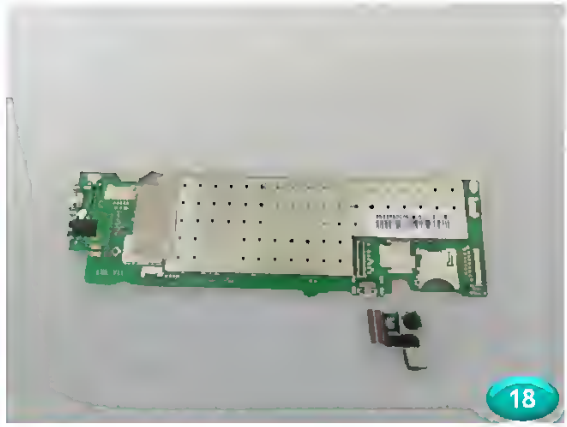



Tear down electrical cloth

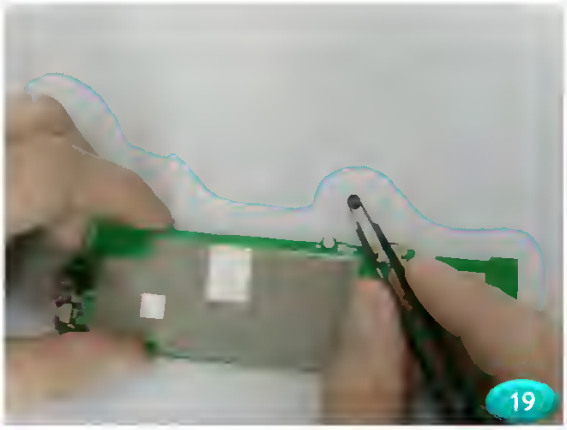
Raise one side of PCBA

Pick out PCBA

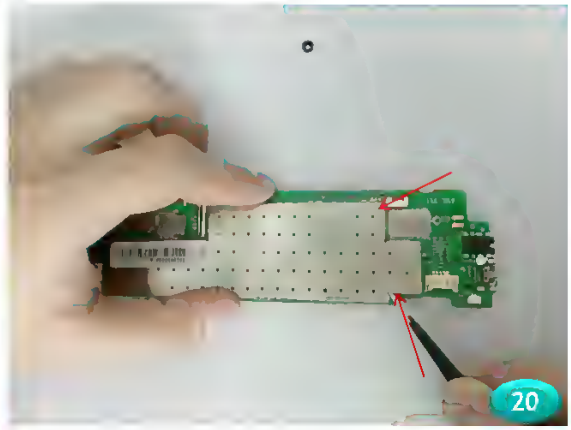
Open cover



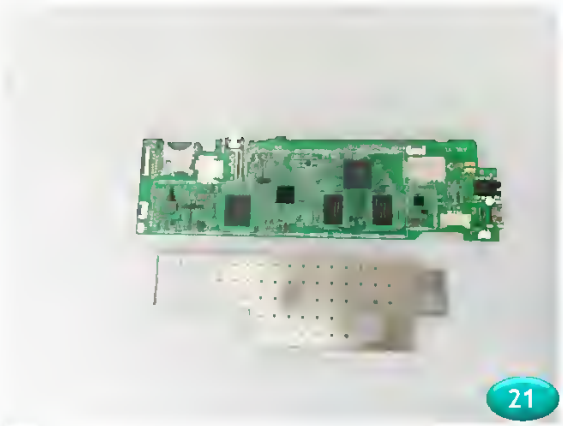

Pick out camera



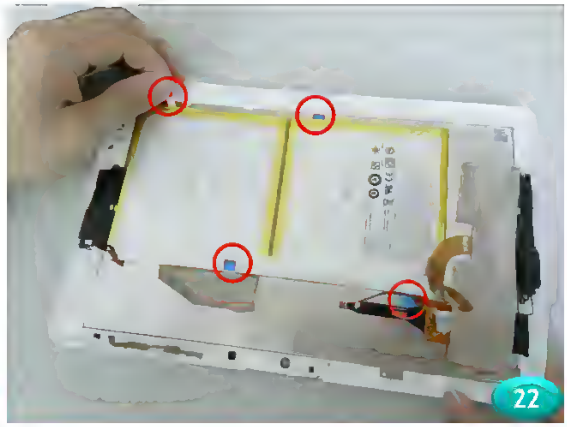

Pick out MIC




Raise shield cover
With nail

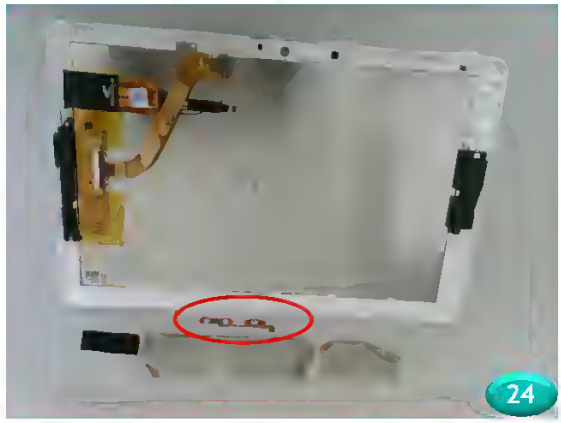



Pick out shield ccover



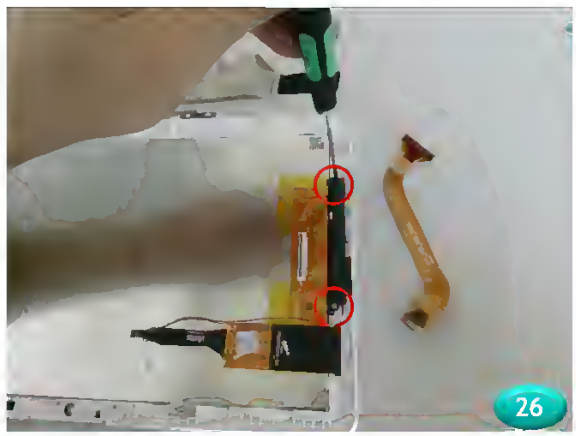

Pull out 3M glue

Pick out battery




Pick electrical cloth, buttons

Pick out
LCD fpc



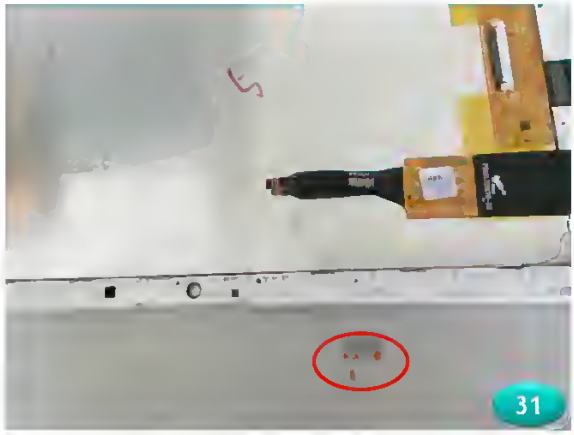

Pick out screw

Pick out right speak

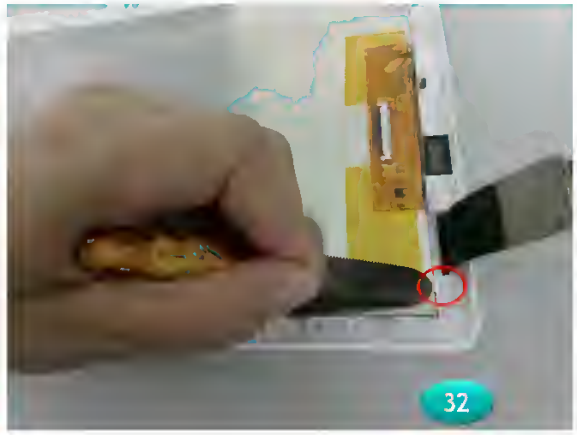
Pick out screw

Pick out left sprak

Pick out fasthern scew




Pick out fasthern screw




Open
locker

Open
locker

Open
locker

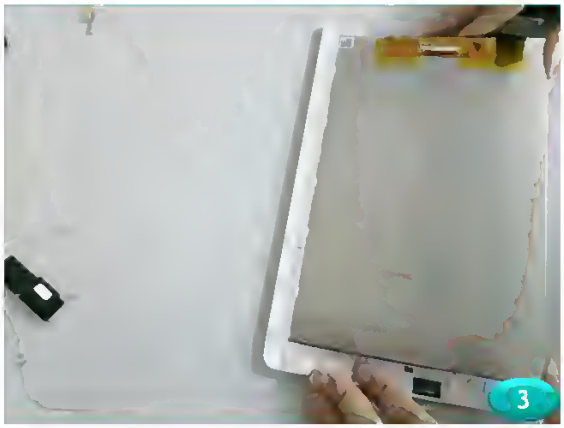
Pick out LCD

Pick out LCD

# 7、 Assembling

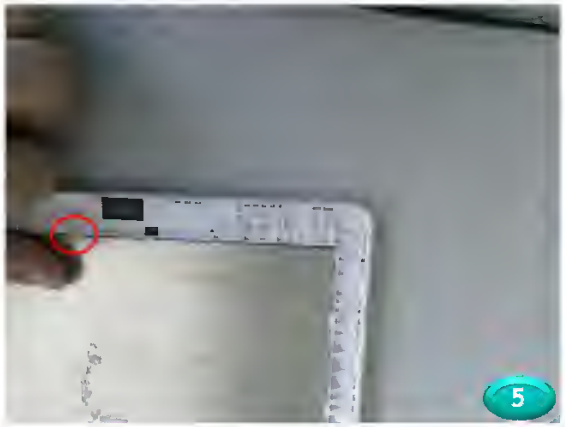
Clean LCD

Clean TP




LCD insert into mid frame of TP

Lock it




Lock it

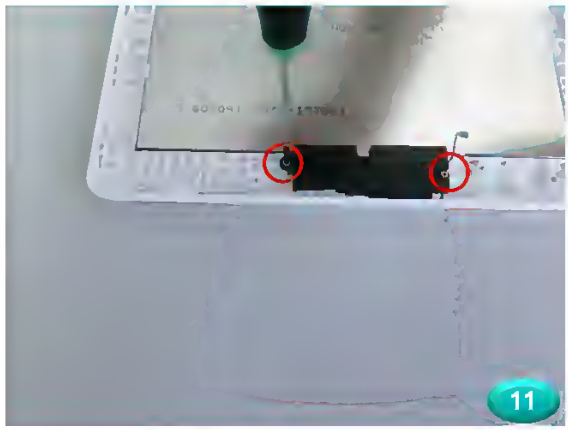
Fasthern screw

Insert LCD fpc

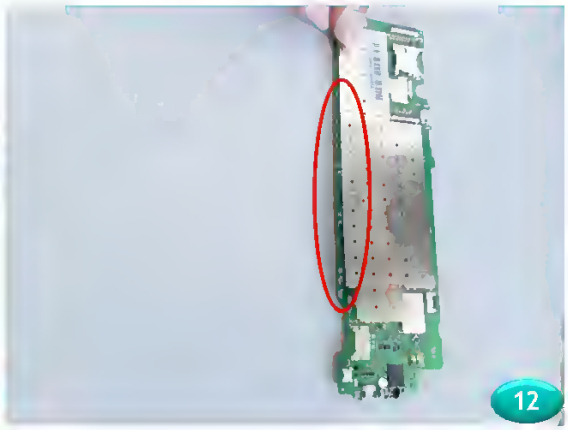
Install right speak and fasthern screw

Paste cloth

Paste cloth



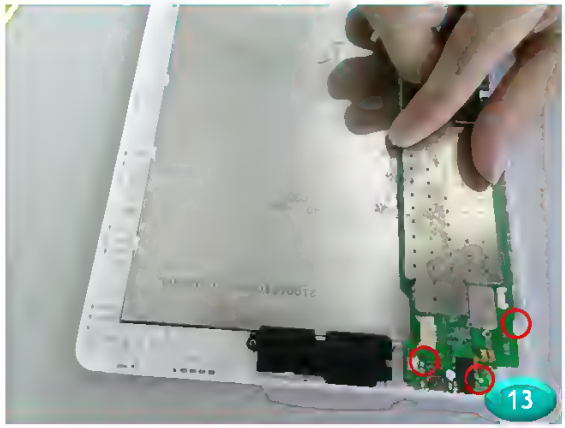

Install left speak



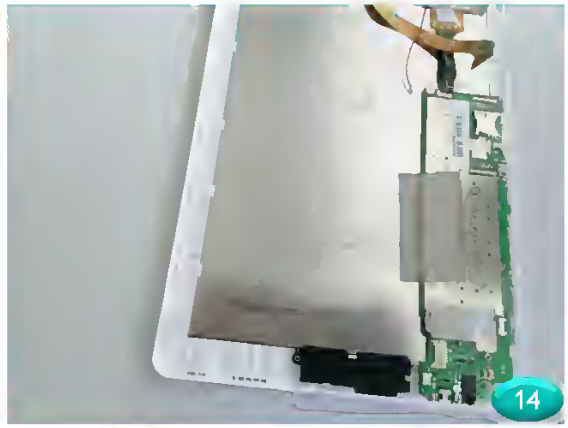

Shield cover should be installed like this

Close the shield cover

Install MIC

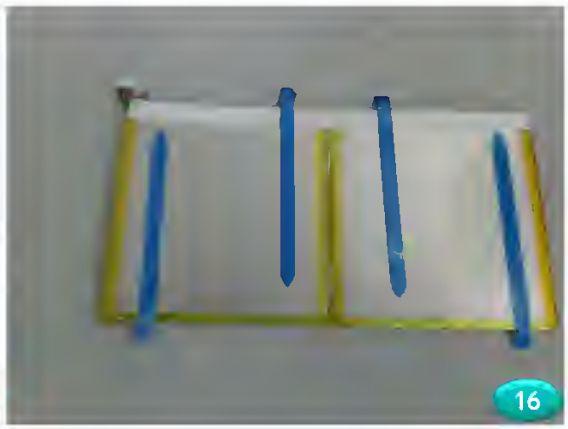



Install the Mainboard like this

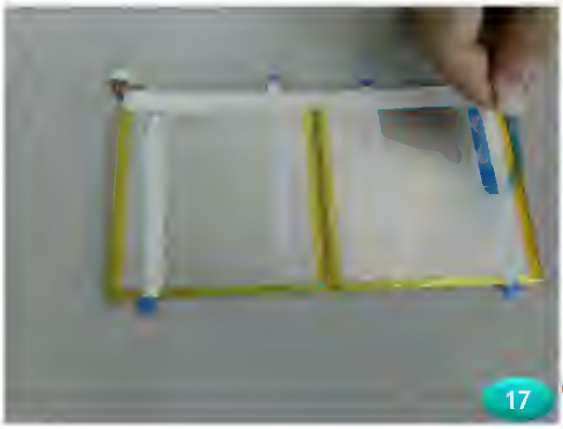



Paste electrical cloth

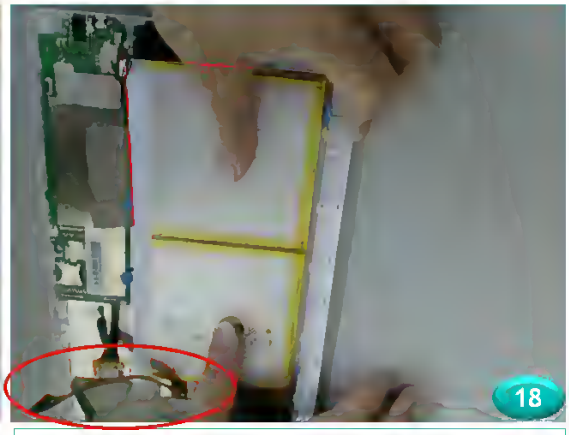
Fastern screw



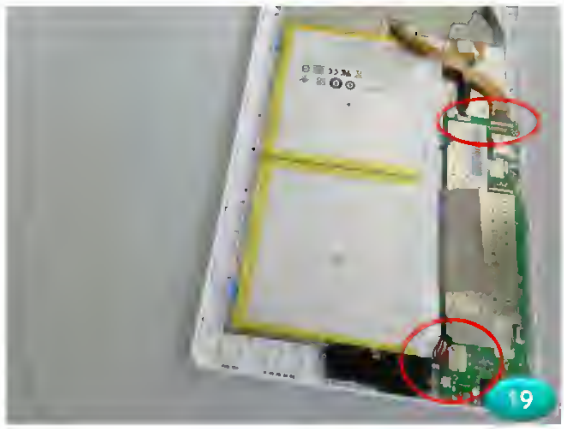

Paster 3M glue on the back of battery



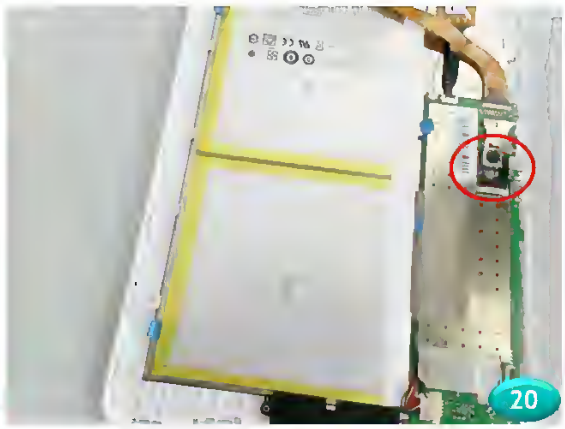

Tear down 3M proof

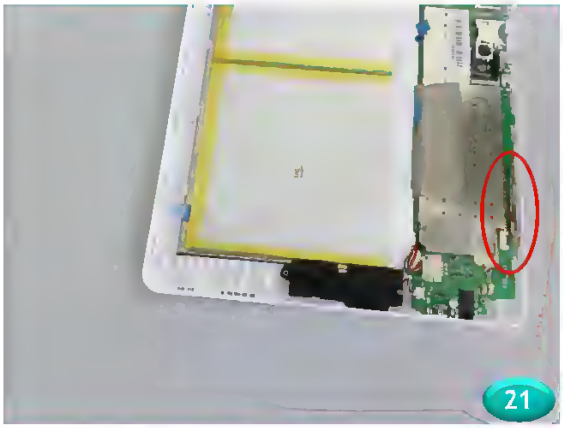



Paste like this

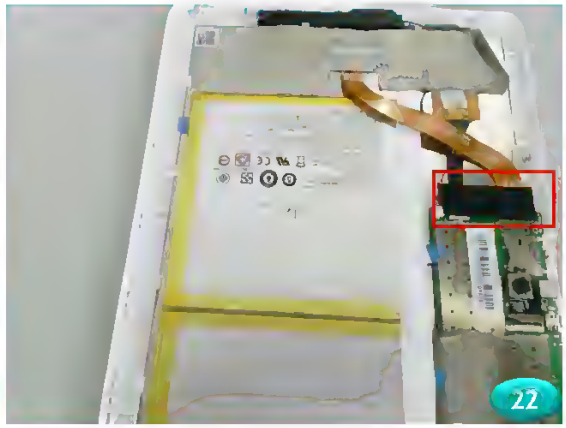



Install TP、Speak、LCD、battery connecctor、camera




Install button

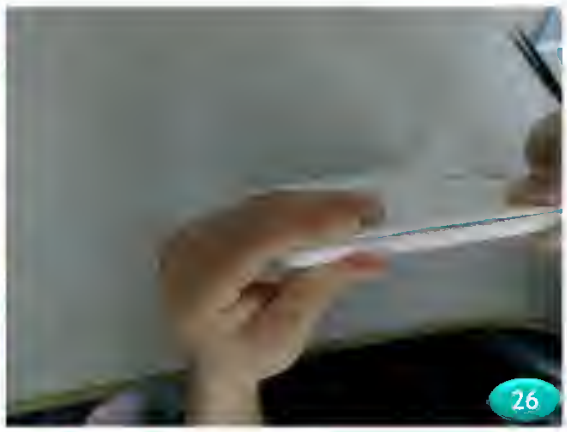



Paste glue cloth

Paste electrical cloth

Install the housing

Install the housing

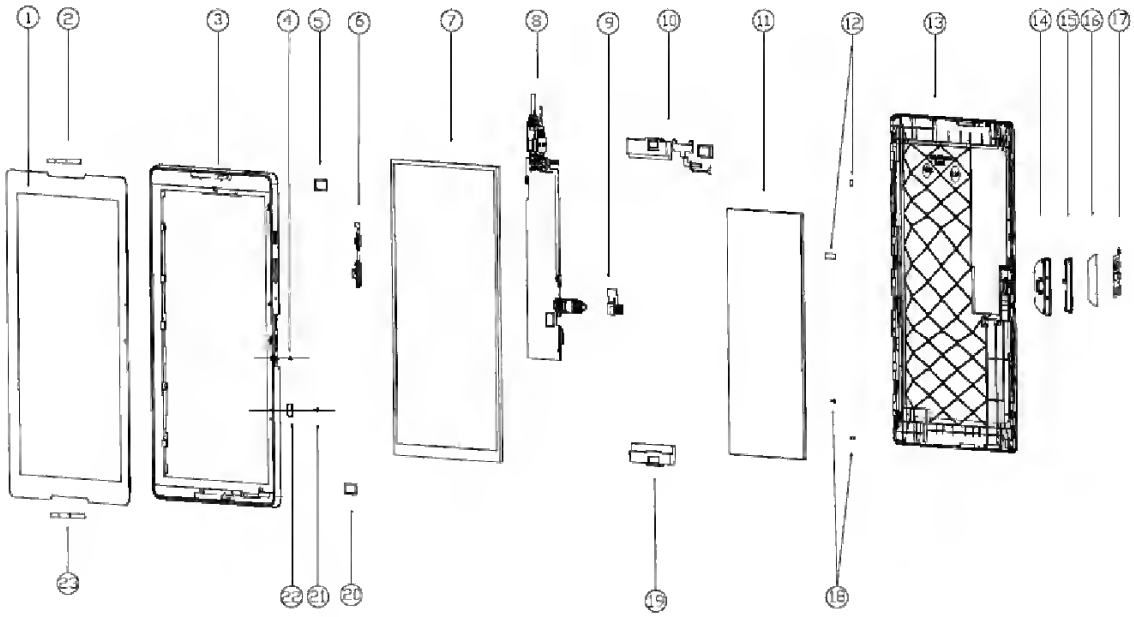



Install the housing

fasten rew

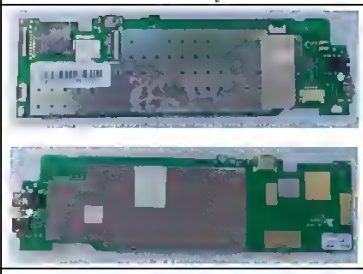
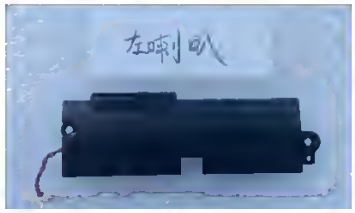
Assembling finished

# 8、 *Explosive View*

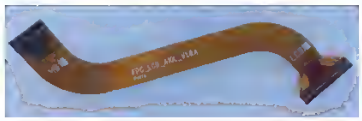


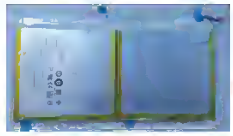
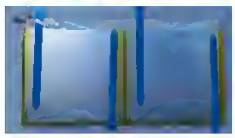
| | | | |
|---|---|---|---|
| *1* | *TP-len* | *13* | *Housing* |
| *2* | *Left speaker* | *14* | *rear camera* |
| *3* | *Mid frame* | *15* | *SD cover* |
| *4* | *housing screw* | *16* | *rear camera len* |
| *5* | *Left speaker cotton* | *17* | *LOGO* |
| *6* | *Power&volume button* | *18* | *screw* |
| *7* | *LCM module* | *19* | *Right speaker BOX* |
| *8* | *PCBA* | *20* | *Right speaker cotton* |
| *9* | *KB for camera* | *21* | *screw* |
| *10* | *Left speaker BOX* | *22* | *Pressure screen* |
| *11* | *battery* | *23* | *Right speaker* |
| *12* | *Fasten cotton* | | |

# 9、 SPL

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 1 |  | Mainboard B3-A30 16GB LF W/TAPE, SPONGE | 2-03-01-055 | 6M.LCNNB 001 |
| 2 |  | SPEAKER - L | 5-13-08-079 | 6M.LCKNB.001 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 3 | | *LCM TOUCH MODULE 10.1' WXGA BLACK W/BEZEL , SIDEKEY, SPEAKER MESH, MIC/CAM RUBBER* | 2-03-01-057 | 6M.LCNNB.001 |
| 4 | | SPEAKER - R | 5-13-08-080 | 23.LCFNB.002 |

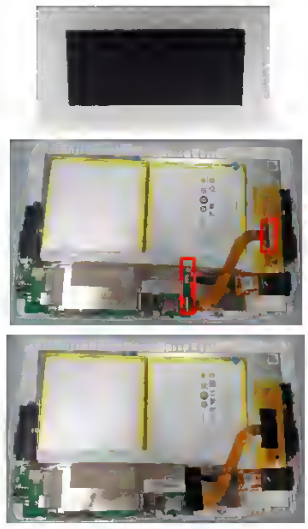
| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 5 | | REAR COVER WHITE W/ANTENNA, RUBBER , CCD LENS | 2-03-01-056 | 60 LCFNB.001 |
| | | REAR COVER BLACK W/ANTENNA, RUBBER , CCD LENS | 2-03-01-058 | 60 LCNNB.001 |
| 6 |  | LCD FPC CABLE | 5-11-04-123 | 50.LCFNB.001 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 7 |   | Battery TCL AP15L Polymer 1S1P TCL 2 Cell 6100mAh Main COMMON for Corona | 5-16-02-398 | KT 0010H 005 |
| 8 | | CAMERA FRONT & REAR | 5-14-04-434 | 57 LCANB.001 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 9 | <br> <br> | CONDUCTIVE FABRIC\56*32*0.1MM\ A10H \R | 4-06-03-081 | 47.LCFNB.001 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 10 | <br> <br> | CONDUCTIVE FABRIC\118*32*0.1MM\ A10L \R | 4-06-03-094 | 47.LCFNB.002 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 11 | | CONDUCTIVE FABRIC\50*30*0.1MM\ A10L \R | 4-06-03-093 | 47.LCFNB.003 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 12 |  | ACETIC ACID ADHESIVE PLASTER\38*15*0.20M M\BLACK\R | 4-06-09-063 | 47.LCANBx1a.002 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 13 | | Adapter DELTA 10W 5.35V/2A ADP-10HW AA LF changeable | 3-10-00-458 | KP.01001.001 |
| | | Adapter LITE-ON 10W 5.35V/2A PA-1100-25AW LF wall-mounted fix AC US TYPE | 3-10-00-461 | KP.01003.005 |
| | | Adapter LITE-ON 10W 5.35V/2A PA-1100-25AE LF wall-mounted fix AC EU TYPE | 3-10-00-465 | XZ.70200.181 |

| NO. | Accessory | Description | SIM PN | ACER PN |
|---|---|---|---|---|
| 14 | | MICRO USB CABLE | 3-13-06-094 | 50 LBKNB.002 |

# *10、Quick Spec*

# Release Notice

| | | |
|---|---|---|
| **Document Name: POR_PES V1.0** | **Doc. No.:** | **Revision: 0** |
| **Project Name: JetfireHD** | **Release Date: Jan 22, 2016** | **Page:** 1 of 12 |

| Model No.: B3-A30 | Revision Status | |
|---|---|---|
| Description | Page | Rev |
| This document is the POR (Plan of Record) of B3-A30 project | | |
| Reason for Release | | |

| Item | Contents | Q'ty | unit | | |
|---|---|---|---|---|---|
| 0 | Revision History | | | | |
| 1 | Hardware Specification | | | | |
| 2 | Software Specification | | | | |
| 3 | Mechanical Engineering Specification | | | | |
| 4 | Options / Accessories | | | | |
| 5 | End-user document, CD, Storage card | | | | |
| 6 | Package | | | | |
| 7 | Certification / Regulation | | | | |
| 8 | SKU table | | | | |
| 9 | Appendix: Test Plan Requirement | | | | |
| 10 | Appendix: Finish Goods Part Number | | | | |
| 11 | Appendix: Environmental / Reliability Requirement | | | | |
| 12 | | | | | |

Copy to(All contents)

Copy(Cover Sheet)

| Approved By | Reviewed By | Prepared By |
|---|---|---|
| | | Jerry Lan |
| | | 2016/01/22 |

Note: This cover sheet form is part of the following release notice and it can't be discarded unless superseded by a revised issue

## 0. Revision History

| Rev | Release Date | Change Description | Editor |
|---|---|---|---|
| V1.0 | 2015/01/22 | First release | Jerry Lan |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## 1. Hardware Specifications

In this section, hardware specifications for the JetfireHD main device (hereafter "device") are detailed in terms of the desired specifications along with the desired features.

| | |
|---|---|
| **System** | |
| Operating System | • Android Marshmallow (6.0) |
| Processor | MTK MT8163 Quad core B Cortex-A53 x 4, 1.3GHz |
| Memory | • RAM<br>■ 1 GB of DDR3L memory<br>• eMMC<br>■ 16GB |
| **Display** | |
| Display | K&D |
| Resolution | 800 x 1280 |
| View angle | Wide view angle 85/85/85/85 degree<br>(should base on device, not based on LCM) |
| Typical backlight | min 300 cd/m2 ,TYP 330 cd/m2 |
| Pixel Pitch | KD 0.0564 x0.1692mm |
| Contrast ratio | 800:1 |
| Touch Panel | Touch IC Focal FT5826S 10 point Touch panel |
| Mechanical | |
| Dimensions | 259(L) X167.5(W) X9.15(H) |
| Weight | < 520 g |
| **Modem** | |
| 3G | N/A |
| LTE | N/A |
| **Antenna performance** | |
| | |
| **Wireless LAN 802.11 a/b/g/n WiFi** | |
| Chipset | MT6625L |
| MAC address | Device must contain WiFi MAC address before shipment |

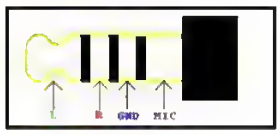
| | |
|---|---|
| Frequency range | Support 2.4GHz band |
| Data Rates | 802.11a: 54 Mbps |
| | 802.11b: 1~11Mbps |
| | 802.11g: 6~54Mbps |
| | 802.11n: MCS 0~7 |
| Operating Range | Indoor <= 30m |
| Output Power | 11a: 14dBm ± 3dB<br>11b : 15dBm ± 1.5dB<br>11g : 14dBm ± 1.5dB<br>11n : 13dBm ± 1.5dB |
| Receive Sensitivity | 802.11a: under -70dBm at 54Mbps |
| | 802.11b: under -79dBbm at 11Mbps |
| | 802.11g: under -67dBm at 54Mbps |
| | 802.11n: under -66dBm at MCS 7 (2.4GHz only) |
| Antenna | Single antenna |
| | Support 2.4/ 5GHz band |
| | Performance should meet test criteria owned by ODM. |
| **Bluetooth® 4.0** | |
| Chipset | MEDIATEK MT6625 |
| MAC address | Device must contain Bluetooth MAC address before shipment |
| Support Profiles | • Low layer BT profile<br>☐RF ☐RFPHY ☐BB ☐LMP ☐LL ☐L2CAP ☐SDP ☐GAP<br>☐RFComm ☐ATT ☐GATT ☐SM ☐SCPP ☐AVCTP ☐AVDTP<br>☐BNEP ■GAVDP ☐SCPP<br>• High layer BT profile<br>■A2DP ■AVRCP ■DI (DID) ☐HFP ■HID ■HOGP ☐HSP<br>☐MAP ■OPP ☐PAN ☐PBAP ☐SPP<br>• Others<br>■IOP |
| Frequency Range | 2.4 GHz (2.400 ~ 2.4835 GHz) |
| Modulation | GFSK, π/4 DQPSK and 8DPSK |
| Channel | 79 channels |
| Data Rates | Basic data rates: GFSK (1Mbps) |
| | EDR data rates: π/4 DQPSK (2Mbps) and 8DPSK (3Mbps) |
| Operating Range | 10m |
| Output Power | Class 2 (0dBm~4dBm) |

| | |
|---|---|
| Receive Sensitivity | Under –83 dBm, BER of 0.1% |
| Antenna | Share the same antenna from WiFi |
| | Performance should meet test criteria owned by ODM. |
| **GPS** | |
| Chipset | MEDIATEK MT6625 (Support GPS & GNSS) |
| Channel | Tracking: 36 (running concurrently with the acquisition channels)<br>Acquisition: 100-200 (flexible non-real time architecture) |
| Sensitivity | Tracking Sensitivity ≦-155 dBm (1 SV at least)<br>Acquisition Sensitivity ≦-140 dBm (4 SVs at least) |
| Accuracy | Hot start: less than 7 seconds (* subject to test environments) |
| | Warm start: less than 40 seconds (* subject to test environments) |
| | Cold start: less than 50 seconds (* subject to test environments) |
| | Position: within 10m for 90% |
| | Velocity: 0.1m/s (* subject to test environments) |
| Protocol | NMEA-0183 v3.0 |
| | GGA, GLL, GSA, GSV, and RMC |
| Antenna | Frequency: 1.575 GHz~1.612GHz (Support GPS & GNSS) |
| | VSWR 2：1 |
| | Performance should meet test criteria owned by ODM. |
| | Pattern Type: Omni-directional |
| **Battery** | |
| Battery Capacity | TCL HYPER-POWER BATTERIES Li-ion polymer 6100mah |
| Battery Life | Standby time on flight mode. min 320 hours |
| | User behavior test . Up to 10 hours base on below sop<br>Test step<br>1. Factory reset<br>2. Set screen brightness to 100 nits<br>3. Connect to WiFi and login Google account (Disable backup/restore)<br>4. Others settings keep in default<br>5. Plug in wired headset<br>6. Charging battery to 100%<br>7. Repeat 720P video playback<br>8. Plug out AC adapter and start test |
| | Video playback<br>DPST (on/off TBD) up to 9 hours when play 720P H 264 video playback on system (not streaming, Wifi/3G/BT /NFC off, total solution 125 nits) |
| | DPST (on/off TBD) Youtube playback 720p video min. 9 hours via WIFI. |
| | Detailed criterion defined in the test summary document released by Acer |

| | |
|---|---|
| Battery low | Two battery level<br>1 Battery low: when battery capacity is 15 %<br>2 Battery very low: when battery capacity is 4 % |
| Charging Time | 1 hour charging to 30% capacity (when in the dark mode)<br>5 hours charge from empty to full by AC adapter (when in the dark mode) |
| Battery Protection | Protection for overheat, overcharge, over-discharge, over- current, over-voltage, Short circuiting Test |
| Temperature | ● Operating Temperature<br>Charge: 0℃ ~45℃<br>Discharge: -10℃ ~ 60℃<br>● Storage Temperature: -20℃ ~45℃ < 1 month ; percentage recoverable capacity 80%<br>-20℃ ~ 35℃ < 6 month |

**Audio**

- Dual speaker: 1 Watt x 2
- Audio Jack: 3.5mm 4 ring earphones with microphone Jack
  Pin define:

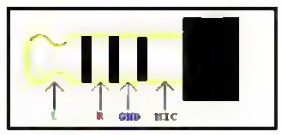



- Voice performance should be certificated by HATS
- [VoIP-headset] Headset Sending loudness should be 3dB~13dB and Headset Receiving loudness shouldn't be over -13dB.
- [VoIP-handheld hands-free] Handheld hands-free sending loudness should be 15dB at 30cm and handheld hands-free receiving loudness should be 10dB at 30cm.
- Headphone application must meet EN50332.
- Single Digital Microphone.
- ASR assist

**Camera**

| | |
|---|---|
| Camera | ● Front camera :<br>2 MP Camera with Fix Focus (GC2145)<br>● Preview 30fps @ 1600x1200<br>● Photo capture <1/20" @ 1600x1200 in JPEG<br>● Video capture recording at 30fps @ 720p in 3gp format<br>● Rear camera :<br>5MP Camera with Auto Focus (OV5670)<br>● Preview 30fps @ 2560x1920 |

| | |
|---|---|
| | • Photo capture <1/20" @ 2560x1920 in JPEG<br>• Video recording at 30fps @ 1080p in 3gp format |
| **Button** | |
| POWER | • Long press > 1 second (±10%) to power on (when device is off).<br>• Long press 1 second to show power-off dialog (when device is on even in lock state)<br>• Once CPU is on, system Acer logo should show up within 2 seconds<br>• Press to suspend the device (when device is on)<br>• Press to resume the device (when device is in suspend mode)<br>■ Once if the system resumes, system will be back to lock screen.<br>■ If system is in lock screen, without unlock by user, the system will suspend after 10 seconds<br>• Long press 5 seconds (±1%) to force power-off device (when device is on, or in power-on procedure, or in lock state)<br>• **The method to lunch boot menu:**<br>■ Hold volume up and press power key for 1 second<br>■ Release power key<br>■ Release volume up |
| Volume UP/Down | **Volume up/down:** Press to increase/decrease the volume<br>• Press right key to volume up in landscape mode, both of 0° orientation and 180° orientation, The other to volume down<br>• Press the upper key to volume up in portrait mode, both of 90° orientation and 270° orientation; The other to volume down |
| Screen lock | N/A |
| Reset hole | N/A |
| Clean boot | N/A |
| **LED Indication** | |
| | N/A |
| **Connector** | |
| USB | NA |
| Micro USB | • Micro-USB 2.0, OTG with charging*1 & non-charging*1<br>• VID: 0502 |

| | |
|---|---|
| | • Life cycle: Min. rating of 10K connect / disconnect cycles |
| HDMI | N/A |
| Audio Jack | • 3.5mm Audio Jack 4ring ( with Mic)<br>  |
| Micro SD connector | • MicroSD memory card up to 128GB<br>• Support hot-plug<br>• Push-push type connector<br>• Read Micro SD cards formatted: FAT / FAT32, exFAT and NTFS |
| **Sensor** | |
| G-Sensor | ST LIS3DH |
| Slimport | N/A |
| eCompass | N/A |
| Gyro-meter | N/A |
| P-Sensor | N/A |
| **Certification** | |
| ESD | Requirement should meet test criteria owned by ODM |
| Certification | • Certification: Defined in the document "JetfireHD LTA"<br>• Country List: Defined in the document "JetfireHD Country List" |
| **Accessory** | |
| Accessories (in box) | • USB Cable<br>• Charger<br>• Manual kits (includes PSI, ITW, Warranty card) |
| Accessories (optional) | • Micro SD Card<br>• Pouch |
| **Others** | |

| | |
|---|---|
| Vibrator | • N/A |

## 2. Software Specifications

Acer Software PM will define specifications/acceptances of software. All software specification must be confirmed and approved by Acer SWPM and Acer PM

In this section, software specifications are detailed with the desired features.

The final system implementations need tested and verified with **CTS (Compatibility Test Suite)**

For those specifications/features not described in this section, please refer to Test Requirements issued by Acer PA team for more details

## 3. Mechanical Engineering / Cosmetics Specification

Acer ME specialist will define specifications/acceptances of Mechanical, and cosmetics. All ME/cosmetic must be confirmed and approved by Acer ME 'and' Acer PM

Cosmetic Spec 1: Neostra Cosmetics Spec for tablet

Cosmetic Spec 2: Cosmetic gap specification

## 4. Options / Accessories

| Items | |
|---|---|
| AC adapter and power cord | • Wall type<br>• Plug includes<br>  ■ Europe 2-pin |

| | |
|---|---|
| | ■ UK 3-pin<br>■ US 2-pin<br>■ Australia 3-pin<br>■ China 3-pin<br>• Power rating:<br>■ Input: 100V~240V<br>■ Output: 10W , 5.2V / 2A<br>• USB type-A connector |
| USB cable | - Connector: micro USB (B-type) for main device and USB for PC<br>- Length: 120cm<br> <br>DD0EE6TH001.pdf<br>- |

## 5. End-user document

End-user document includes *QUICK GUIDE* and *USER'S MANUAL*.

*QUICK GUIDE*: serves as starter's guide, which is quick information to device/cradle. (hot copy)
*USER'S MANUAL*.: User's detailed reference to device/cradle (on-line)
*Safety leaflet:* Safety information (Hot copy)

| End-user document | |
|---|---|
| QUICK GUIDE | |
| Safety leaflet | |
| USER'S OMEGAAL ( on-line) | EN/FR/DE/ES/IT/AR/TR/PL/CZ/PT/RU/NL/TC/SC/ID/TH/JP/KR |

## 6. Package

| Packaging | |
|---|---|
| General Requirement | - Must comply WEEE starting 1 March, 2006<br>- Must comply RoHS and ACER GREEN PRODUCT requirement starting from day one<br>- Hologen free, at least PVC free |
| Pallet | - A pallet contains cartons<br>- Pallet plan is proposed by vendor and confirmed/approved by Acer Fulfillment people (Jasmine Yu & Sandra Lo)<br>- Pallet must be sealed properly and protected from shock/vibration/dropping damage. Corresponding test plan/result must be offered<br>- Explosion diagram must be offered |
| Carton | - A carton contains boxes.<br>- Carton plan is proposed by vendor and confirmed/approved by Acer Fulfillment people (Jasmine Yu & Sandra Lo)<br>- A 'carton label', a stick that lists all serial s/n, p/n of boxes inside the carton, is needed. Carton label must be approved by Acer PM<br>- Carton must be sealed properly and protected from shock/vibration/dropping damage. Corresponding test plan/result must be offered.<br>- Explosion diagram must be offered |
| Box | - A box contains the following "box items"<br>. device, wrapped with a plastic bag and screen is covered with plastic film.<br>. end-user document, storage card<br>. Other items, as indicated in "4. Options/Accessories"<br>- "Box items" be wrapped well with foil. A proper recycle mark is required on foil wrap.<br>- Box plan is proposed by vendor and confirmed/approved by Acer PM<br>- Box must be wrapped and protected from shock/vibration/dropping damages.<br>- A "box label" is needed and must be approved by Acer PM. A box label is a sticker that has product model, s/n, p/n, EAN/UPC code, recycle mark, and other information/mark that might be applicable.<br>- A "CE conformity declaration" label is required for Europe SKU<br>- Box artwork is provided by Acer<br>- Box package plan must be offered.<br>- Final article of box package (with all box items included) must be approved |

## 7. Certification / Regulation

For device, their certification/Regulation/Safety must in name of Acer.
Acer Regulation will coordinate and define all-related certification/regulation.

Please follow certification / SOW_of_Acer_Tablet PC_Device_v1.1_20110425.pdf

## 8. SKU Table

The following SKU table is tentative and subject to change. Note that in the FCS (First Customer Shipment) the Acer Giordano device must support the following languages:

International English, French, Italian, German, Spanish, European Portuguese, Dutch, Danish, Norwegian, Swedish, Korean, Chinese Traditional and Chinese Simplified.

**Please refer to Acer JetfireHD SCL / SKU Matrix for the detail SKU plan**

## 9. Appendix: Test Plan Requirements

Test plan requirement will be offered or defined by Acer DQM. Vendor must submit Test Plan accordingly to Acer DQM / PM for approval/confirmation.

## 10. Appendix: Finish Goods Part Number

Deliver in a separate file.

## 11. Appendix: Environmental / Reliability Requirement

Environmental / Reliability requirement will be offered or defined by Acer Corporate Sustainability Office (CSO). Vendor must submit Test Report accordingly to Acer CSO / PM for approval/confirmation.

**The end!**